

Parental Love Pills: Some Ethical Considerations

Forthcoming in *Bioethics*

S. MATTHEW LIAO

Faculty of Philosophy, Oxford University, Littlegate House, 16/17 St. Ebbes St., Oxford
OX1 1PT, UK; e-mail: matthew.liao@philosophy.ox.ac.uk; www.smatthewliao.com

Parental Love Pills: Some Ethical Considerations

Abstract

It may soon be possible to develop pills that allow parents to induce in themselves more loving behavior, attitudes and emotions towards their children. In this paper, I consider whether pharmacologically-induced parental love can satisfy reasonable conditions of authenticity; why anyone would be interested in taking such parental love pills at all, and whether inducing parental love pharmacologically promotes narcissism or results in self-instrumentalization. I also examine how the availability of such pills may affect the duty to love a child.

Parental Love Pills: Some Ethical Considerations

I. The possibility of parental love pills

It is widely recognized that children need to be loved in order to develop into adequately functioning individuals who can pursue good lives. There is also ample scientific evidence to support this empirical fact. For example, studies of children in institutions found that children who did not receive love but only adequate care became ill more frequently; their learning capacities deteriorated significantly; they became decreasingly interested in their environment; they failed to thrive physically by failing to gain weight or height or both; they suffered insomnia; they were constantly depressed; and they eventually developed severe learning disabilities.¹ In studies of monkeys in laboratories, infant monkeys raised in maternal privation settings had hampered social, cognitive, and emotional development.² More recent, neuroscientific studies conducted on various animals have found that lack of love can adversely affect the development of the brain biogenic amine neurotransmitter systems such as norepinephrine (NE), dopamine (DA),

¹ R. Spitz & K.M. Wolf. Anaclitic Depression: An inquiry into the genesis of psychiatric conditions in early childhood. *The Psychoanalytic Study of the Child* 1946; 2: 313-342; J. Hodges & B. Tizard. Social and family relationships of ex-institutional adolescents. *Journal of child psychology and psychiatry* 1989; 30: 77-97; S. Kaler & B. Freeman. Analysis of environmental deprivation: Cognitive and social development in Romanian orphans. *Journal of child psychology and psychiatry* 1994; 35: 769-781.

² H.F. Harlow, et al. Total social isolation in monkeys. *Proceedings of the national academy of sciences* 1965; 54: 90-96.

and serotonin (5HT); and the hypothalamic-pituitary-adrenal (HPA) axis;³ cause the development of adrenal glucocorticoid responses to be modified in negative ways;⁴ and affect the biochemical processes of growth hormone (GH) secretion leading to psychosocial dwarfism.⁵

Recently, there have also been studies suggesting that affiliative behavior such as parent-infant pair bonding and other aspects of attachment could be induced pharmacologically. Oxytocin in particular has been implicated in this process.⁶ Produced by the neurons of the hypothalamus, oxytocin is released from axon terminals in the pituitary gland into the bloodstream, where it stimulates uterine contraction and milk ejection, which plays a role in initiating maternal behavior.⁷ In addition, oxytocin is also secreted into the brain of males and females from hypothalamic neurons to limbic

³ C. Shannon, et al. Interindividual differences in neonatal serotonin functioning: Stability of interindividual differences and behavioral correlates. *American Journal of Primatology* 1995; 36: 155.

⁴ J.D. Coplan, et al. Cerebrospinal fluid concentrations of somatostatin and biogenic amines in growth primates reared by mothers exposed to manipulated foraging conditions. *Archives of General Psychiatry* 1998; 55: 473-477.

⁵ S. Wang, et al. Neonatal deprivation of maternal touch may suppress ornithine decarboxylase via down regulation of proto-oncogenes c-myc and max. *Journal of Neuroscience* 1996; 16: 836-842.

⁶ Other neuropeptides that might be involved in this process include vasopressin and prolactin.

⁷ J. Burbach, et al. 2006. Oxytocin: Synthesis, Secretion, and Reproductive Functions. In Knobil and Neill's *Physiology of Reproduction*. J. Neill, ed.: Elsevier: 3055-3128; T.R. Insel & L.J. Young. *The Neurobiology of Attachment*. *Nat Rev Neurosci* 2001; 2: 129-136.

sites, including the hippocampus, amygdala, striatum, and nuclei in the mid- and hindbrain.⁸

A number of animal studies have suggested the association between oxytocin and affiliative behavior such as parent-infant pair bonding. For example, injection of oxytocin facilitates maternal behavior in female nulliparous rats,⁹ which typically find pups to be aversive and actively avoid them. Conversely, injection of oxytocin antagonists inhibits the initiation, but not the maintenance of maternal behavior in these rats.¹⁰ Also, time spent by female prairie voles crouching over juvenile pups was positively correlated with the density of oxytocin receptor binding in the nucleus accumbens, and injecting oxytocin antagonists in the nucleus accumbens blocked maternal behavior.¹¹ Moreover, while sheep display selective maternal care, administering oxytocin facilitates the acceptance of a foreign lamb, even in nonpregnant ewe.¹²

⁸ M. Sofroniew. Morphology of Vasopressin and Oxytocin Neurones and Their Central and Vascular Projections. *Prog Brain Res* 1983; 60: 101-114.

⁹ C.A. Pedersen, et al. Oxytocin Induces Maternal Behavior in Virgin Female Rats. *Science* 1982; 216: 648-650.

¹⁰ T.R. Insel. Oxytocin-a Neuropeptide for Affiliation: Evidence from Behavioral, Receptor Autoradiographic, and Comparative Studies. *Psychoneuroendocrinology* 1992; 17: 3-35.

¹¹ D. Olazábal & L. Young. Oxytocin receptors in the nucleus accumbens facilitate "spontaneous" maternal behavior in adult female prairie voles. *Neuroscience* 2006; 141: 559-568.

¹² K.M. Kendrick, et al. Intracerebroventricular oxytocin stimulates maternal behaviour in the sheep. *Neuroendocrinology* 1987; 46: 56-61.

In humans, oxytocin has been associated with bonding-related factors such as empathy, closeness, and trust.¹³ For example, intranasally administered oxytocin was shown significantly to promote trust among male volunteers playing an investment game.¹⁴ A control risk condition revealed that the effects of oxytocin were not simply due to an increased willingness to engage in risky behavior; rather, they were due to participants' willingness to accept social risks. Also, it has been shown that following birth, mother-infant touch and contact stimulate oxytocin release,¹⁵ and early parental neglect has been found to alter this release.¹⁶ Taken together as a whole, these studies suggest that exogenously administered oxytocin can initiate affiliative behavior, possibly by decreasing anxiety and promoting trust and prosocial behavior.

For our purpose, if we can develop drugs that enable parents to feel and behave more lovingly towards their children, what kind of ethical questions would such 'parental love pills' raise? In this paper, I shall set aside questions about safety, justice, and issues concerning research ethics such as risk, informed consent, conflicts of interest, definitions of efficacy, and so on, which are important questions that pertain to the development and

¹³ K.M. Grewen, et al. Effects of Partner Support on Resting Oxytocin, Cortisol, Norepinephrine, and Blood Pressure Before and After Warm Partner Contact. *Psychosom Med* 2005; 67: 531-538.

¹⁴ M. Kosfeld, et al. Oxytocin increases trust in humans. *Nature* 2005; 435: 673-676.

¹⁵ A. Matthiesen, et al. Postpartum Maternal Oxytocin Release by Newborns: Effects of Infant Hand Massage and Sucking. *Birth* 2001; 28: 13-19.

¹⁶ A.B.W. Fries, et al. Early experience in humans is associated with changes in neuropeptides critical for regulating social behavior. *PNAS* 2005; 102: 17237-17240.

use of all new technologies.¹⁷ I shall also set aside issues concerning what might be called relational uses of these drugs, that is, issues regarding whether one group might coerce another, whether many individuals' using these pills might make everyone worse off, and so on. My focus here will be on personal uses.

I am interested in, for example, whether the resulting parental love would be authentic and why anyone would be interested in taking such pills. Also, what implications do these pills have for a duty to love a child? To answer these questions, I begin by sketching in more detail the kind of love that children need and discussing whether this kind of love can be induced.

II. Parental love and its induction

I take the kind of love that children need, namely, parental love, to have the following characteristics:¹⁸

To love a child is to seek a highly intense interaction with the child, where one values the child for the child's sake, where one seeks to bring about and to maintain physical and psychological proximity with the child, where one seeks to

¹⁷ For an excellent discussion of these topics, see, e.g., J. Cohen, et al. eds. 2006. *The Power of Pills: Social, Ethical and Legal Issues in Drug Development, Marketing and Pricing*. London: Pluto Press.

¹⁸ By parental love, I do not mean that only biological parents can provide this kind of love. Other people such as stepparents, foster-parents, or nannies can also provide it.

promote the child's well-being for the child's sake, and where one desires that the child reciprocate or, at least, is responsive to, one's love.¹⁹

One important feature of parental love is valuing the child for the child's sake. As the child psychologist, Mia Pringle, argues:

The basic and all-pervasive feature of parental love is that the child is valued unconditionally and for his own sake, irrespective of his sex, appearance, abilities or personality.²⁰

In addition, the “highly intense” aspect of this definition is intended to capture the idea that parental love has emotional components that permeate through all of our actions with a child. Furthermore, if we love a child, then we would try to be close and maintain closeness to the child, both physically and psychologically, other things being equal. Physically, we would try to be with the child as much as it is appropriate and optimal. Psychologically, we would try to understand the child from the child's perspective and we would try to open up ourselves to the child, when the child is capable of such understanding. Moreover, we would try to increase the child's prospect of having a good life for the child's sake. Finally, very young children cannot reciprocate a parent's love.

¹⁹ See, e.g., S. Matthew Liao. The Right of Children to Be Loved. *Journal of Political Philosophy* 2006; 14: 420-440.

²⁰ M.K. Pringle. 1986. *The Needs of Children*. 3 edn. London: Routledge, p. 35.

Nevertheless, a parent who loves his child typically would desire that a child would love him back if the child could do so.

Notice that on this account of parental love, parental love is a complex of behavior, attitudes and emotions. The behavioral aspects of parental love involve seeking to bring about physical and psychological proximity with the child and seeking to promote the child's well-being for the child's sake. The attitudinal aspect of parental love involves valuing the child for the child's sake, and the emotional aspect of parental love is captured by the "highly intense" aspect of this definition.

In adopting such a comprehensive account of parental love, I am therefore interested in all the recognized aspects of parental love. This means that any pharmacological induction of parental love that satisfies this account of parental love should also satisfy any narrower, less inclusive account of parental love.

Next, let us ask whether parental love can be induced. We have, in my view, a variety of direct and indirect, *non-pharmacological* means of inducing parental love in ourselves, including both the emotional and the attitudinal aspects of parental love.²¹ Consider the prospect of bringing about the emotional aspect of parental love with success. While recognizing that the emotions associated with parental love can be quite wide ranging, to simplify the discussion, let us take a strong sense of warmth and affection to be a crucial part of the emotional aspect of parental love at least sometimes during the course of loving a child. One method of bringing about these emotions with

²¹ For a more extensive discussion of these points, see Liao, *The Right of Children to Be Loved*, pp. 426-430; S. Matthew Liao. *The Idea of a Duty to Love*. *Journal of Value Inquiry* 2006; 40: 1-22.

success is through internal control, according to which one gives oneself reasons to have particular emotions or one reflects on the reasons why one tends to experience particular emotions in particular circumstances or towards particular persons. For instance, we can give ourselves reasons to have the emotions associated with parental love for a child. Many reasons are possible, but a good reason is that children need this emotional aspect of love in order to develop certain capacities necessary to pursue a good life. Or, suppose one realizes that one's antipathy toward a child is due to the fact that the child was unplanned. One may then recognize that this is not the fault of the child and that this is not a good reason for disliking the child. If one begins to see the child without this initial prejudice, there is a chance that one would be able to bring about warmth and affection for the child.²²

Another method is external control, according to which one deliberately places oneself in situations in which one knows that one would probably experience particular emotions of parental love. Suppose that one knows that getting enough sleep helps one to be more affectionate and warm towards the child. One might make sure that one has enough sleep each night so that one would be more loving toward the child.

Finally, one can cultivate one's emotional capacities for parental love by repeatedly practicing the ways of external and internal control just described. To cultivate one's capacity to love a particular child, one might try repeatedly reminding oneself of the importance of love for a child's healthy development, and repeatedly placing oneself in situations in which one is likely to feel these emotions of love for a

²² See also I. Murdoch. 1970. *The Sovereignty of Good*. London: Routledge and Kegan Paul, pp. 17-18; P. Goldie. Explaining expressions of emotion. *Mind* 2000; 109: 25-37, p. 33, for a similar point.

child. For example, one might make arrangements in one's daily schedule to allow one to spend some quality time with one's child. Through engaging in these methods repeatedly over time, there is a good chance that one would increase one's capacity to feel affection and warmth for the child.

It is worth noting here that this kind of cultivation is not merely a repetition of internal and external control over time. Truly to be successful, one may be required to evaluate critically some of one's fundamental values. Moreover, in all these methods, the objective is obviously not just to have the appearance of the emotions appropriate for the circumstance, but actually to have the genuine emotions appropriate for the circumstance.

Similar methods can be employed to bring about the attitudinal aspect of parental love with success. To see this, it is helpful to note that most, if not all, attitudes are made up of facts and values. For example, the attitude that 'animals that are as sentient as some human beings should be treated with equal consideration as those human beings' is made up of certain facts such as that 'some animals are as sentient as some human beings' and certain values such as 'given equal sentience, these animals should be treated equally as some human beings.' For our purpose, it is sufficient if one can actively bring about the valuational aspect of an attitude such as parental love with success. For example, suppose a child is born with certain temperament and genetic make-up. Although there is not much we can do to alter these facts about the child, we can still try to value the child positively through the method of internal control. For instance, faced with a child who is learning to eat, we can decide to regard the child as happy and persevering rather than as messy and annoying. Or, faced with a child who does not

Speak much, we can decide to regard the child as quiet and shy rather than as unresponsive and uninterested.

We can also bring about the valuational aspect of parental love with success through external control by deliberately placing ourselves in circumstances in which we are likely to develop a particular attitude. For example, if we know that getting enough sleep helps us to have more positive attitudes towards the child, then we might make sure that we have enough sleep each night. Likewise, we can cultivate the valuational aspect of parental love by repeatedly practicing the ways of external and internal control just described. Overtime, it is likely that we will develop the attitudes associated with parental love towards the child.

For our purpose, let us suppose that these ordinary, non-pharmacological means of inducing parental love can be successful at producing authentic parental love. It seems that using drugs to induce parental love can be seen as just an extension of these ordinary, non-pharmacological means. Some might argue though that authentic parental love can only arise spontaneously, so that parental love that is induced by drugs could not be authentic. But if authentic parental love requires spontaneity, then even the more familiar methods of bringing about parental love such as making sure we get enough sleep so that we would be more loving towards a child would not qualify as authentic love. This suggests that the commonsense ways of discriminating genuine from ersatz parental love would not deny authenticity to induced parental love merely because it was induced. This said, there are other, more plausible concerns regarding authenticity.

For instance, some might worry that pharmacologically induced parental love might not behave like real parental love.²³ Indeed, if, for example, administering oxytocin made someone exhibit affiliative behavior and emotions towards every child indiscriminately, this parental love would seem superficial.

To address this problem, one might propose “success conditions” for drugs that purported to induce parental love. For example, one can normally “turn off” certain aspects of parental love if the circumstances evoking these aspects are not appropriate. So, if one discovered that a child has misbehaved and should be disciplined, one would typically stop exhibiting affiliative behavior and emotions, and would instead be angry and indignant. Hence, for a drug-induced parental love to qualify as authentic phenomenologically, one should be able to stop some aspects of its manifestation when circumstances do not warrant them.

Relatedly, in the case of real parental love, one typically can exhibit a number of behavior, emotions and attitudes concurrently, e.g., one can be happy about a child’s achievement and displeased about a child’s nonchalant attitudes towards the achievement at roughly the same time. So, if a pharmacologically induced parental love is to qualify as authentic phenomenologically, its induction should not prevent one from exhibiting other behavior, emotions and attitudes concurrently.

²³ For a discussion of the ethics of pharmacological induction of emotions generally, see D. Wasserman & S. Matthew Liao. Issues in the Pharmacological Induction of Emotions. *Journal of Applied Philosophy* 2008; 25: 178-192.

Moreover, the intensity of the pharmacologically induced parental love should vary with its object. A pill that produced parental love as deep for a total stranger as for one's child would not be adequately discriminating.

Another authenticity-related concern is whether pharmacologically induced parental love would really be "one's own". The notion of ownership here is akin to Frankfurt's notion of identification.²⁴ According to Frankfurt, for one to be morally responsible for an action, the desire behind it must be one with which one identifies. For Frankfurt, this means that desire must be endorsed by a higher-order desire: we must desire to act upon that desire. Frankfurt goes so far as to hold that we are not fully responsible for actions that are not "wholehearted," that is, for actions that arise from desires opposed by other desires of the same order, or by any higher-order desire. Similarly, it might be thought that for parental love to qualify as one's own, it must be fully consistent with one's beliefs and attitudes.²⁵

The "wholeheartedness" requirement seems however too strong. It would deny ownership of parental love whenever we were ambivalent or conflicted. If the empirical evidence is correct that many mothers do not immediately feel spontaneous love towards their newborn child, then ambivalence seems to be a pervasive feature of parental love.²⁶

²⁴ H. Frankfurt. 1988. *The Importance of What We Care About: Philosophical Essays*. Cambridge: Cambridge University Press.

²⁵ See, e.g., M. Salmela. What is Emotional Authenticity? *Journal for the Theory of Social Behaviour* 2005; 35: 209-230.

²⁶ C.T. Beck. Postpartum Depressed Mothers' Experiences Interacting With Their Children. *Nursing Research* 1996; 45: 98-104.

Moreover, we often have recalcitrant attitudes and beliefs, which seem to conflict with our other attitudes and beliefs, e.g. frustration at the idea that after having a child, one's life is no longer completely one's own. If our conflicting responses arise from such conflicting attitudes and beliefs, we regard those responses as fully our own.²⁷

Wholeheartedness demands too much.

In any case, attempts to induce parental love pharmacologically will usually be induced by consonant beliefs. Often, it is just because we believe parental love to be warranted, if not required, that we seek to induce it. In such circumstances, a pill may be able to stimulate the associated attitudes, behavior, and emotions that would have ordinarily accompanied the belief.

A third authenticity-related concern is that pharmacologically induced parental love may drastically alter one's temperament and thereby alienate one from one's older, "genuine" self.²⁸ For example, a person with a morose temperament might develop a cheery one as a result of repeatedly taking parental love pills. If he valued and identified with his older, morose self, he might find his new temperament distasteful; the pill would have alienated him from his older self.

²⁷ It is possible that inducing an emotion in the face of conflicting attitudes and beliefs might cause us to modify those attitudes and beliefs. We might be more inclined to accept attitudes and beliefs consonant with strong induced emotions, and reject ones dissonant with them.

²⁸ See, e.g., P.D. Kramer. 1993. *Listening to Prozac*. New York: Penguin; C. Elliott. 2003. *Better than well*. American medicine meets the American dream. New York: W.W. Norton & Company; President's Council on Bioethics. 2003. *Beyond Therapy*. Biotechnology and the Pursuit of Happiness. New York: Regan Books.

It seems possible that parental love pills could have such effects. If it turns out that they do, it is imperative to make people aware of the risk. On the other hand, a person might take such a drug voluntarily, fully aware of its personality-changing effects. If so, the concern about alienation becomes less acute; there is no reason why he should not choose to fashion himself into someone who is loving towards one's child if that is what he really desired.

It remains, of course, a speculative matter whether pharmacology will be able to induce parental love, or merely make individuals more susceptible to a wide range of emotions and attitudes associated with parental love. So it is worth emphasizing that my aim is not to make a case for optimism but against categorical pessimism. That is, my claim is very modest – it does not prejudge the success of pharmacological interventions; it merely holds that there is no a priori reason why a drug could not induce parental love in someone who could not otherwise experience it, especially in light of the recent scientific findings mentioned earlier.

III. Why anyone would want to take a parental love pill

Even if parental love could be induced pharmacologically, why would anyone be interested in taking such a pill? There are circumstances in which one wants to love a child, but one is unable to do so. For example, as I mentioned earlier, instead of feeling spontaneous love for their newborn child, it is not uncommon for mothers – perhaps owing to postpartum depression – to feel instead estrangement and resentment towards their child. Or, step- or adoptive parents might really want to love their step- or adopted

children, but find it very difficult to do so. On these occasions, it can be frustrating not to be able to exhibit the kind of love that children need. In fact, if the empirical literature mentioned in the beginning is correct, lack of love can cause serious harm to a child's development into an adequately functioning individual. To avoid causing children such harm, a plausible case can be made that children have a right to be loved, which entails that others have a duty to provide them with parental love.²⁹

If parental love pills were available, this might enable one to provide the kind of love that children need, thereby relieving the frustration that one may feel at not being able to display and experience such love. Also, in being able to induce parental love that one does not feel spontaneously, one may also be able to at least partially fulfill a duty to love a child.

IV. Is the attempt pharmacologically to induce parental love inherently narcissistic?

While there may be sound rationale for wanting to induce parental love pharmacologically, doing so can raise a number of normative issues. For example, in *Sound Sentiment*, David Pugmire argues that emotion becomes narcissistic when the focus shifts from its object to its subjective experience.³⁰ It might be argued that deliberately inducing parental love is necessarily focusing on the subjective experience rather than the object, namely, the child. As such, it is inherently narcissistic and undermines the idea that when one loves a child, one should be valuing the child for the child's sake and trying to promote the child's well-being for the child's sake.

²⁹ I make this case in Liao, *The Right of Children to Be Loved*, op. cit.

³⁰ D. Pugmire. 2005. *Sound Sentiments: Integrity in the Emotions*. Oxford: Oxford University Press.

This concern should be taken seriously. One would certainly feel that parental love had become debased if a parent talks exclusively about how he feels, and what his attitudes are towards a child, rather than what the child needs in order to develop adequately. But this claim can be overstated. Pugmire would surely not think it narcissistic for a parent to take notice of her lack of sensitivity to her children's tribulations and triumphs, at least if it led her to take a greater interest in her children's lives. Of course, if a parent took a pill to increase her sensitivity without attempting to increase her involvement in her children's lives, her effort might well seem cosmetic. But if she took the drug to deepen her attitudinal, emotional and social involvement in her children's lives, it would appear to be an acceptable means to achieving a stronger relationship with them.

V. Does one instrumentalize oneself by taking pills to induce parental love?

A further worry about the pharmacological induction of parental love is that in manipulating our emotions and attitudes this way, we may be treating ourselves as mere means, or instrumentalizing ourselves, rather than treating ourselves as ends.³¹

According to this line of thought, we are ends because we are rational agents capable of moral deliberation. We treat ourselves as ends when we try to modify our emotions and attitudes by engaging with our beliefs, but we treat ourselves as mere means when we

³¹ See, e.g., C. Freedman. 1998. Aspirin for the Mind? Some Ethical Worries about Psychopharmacology. In *Enhancing Human Traits: Ethical and Social Implications*. E. Parens, ed. Washington, D.C.: Georgetown University Press: 135-150.

bypass our beliefs. Using pills to induce parental love bypasses our beliefs. Therefore, in doing so, we treat ourselves as mere means.

This objection certainly has some force in third-person contexts. For example, if an individual advised a parent to take such a pill without finding out whether the parent really believed that he, the parent, should love his child or whether he was just trying to wear the right emotions and attitudes for the occasion, it could be argued that the individual was not treating the parent as an end. However, suppose that the advice was given after a thoughtful, probing discussion with the parent, which revealed that he really wants to love his child but finds himself unable to experience such love. Arguably, the individual would have respected the parent as an end when advising him to take the pill.

This contrast is equally relevant in first-person contexts. If I took such a pill without even thinking about whether it was the right course of action for me, then I may indeed be instrumentalizing myself by bypassing my beliefs and values. However, if I took a parental love pill after careful self-examination, I arguably have treated myself as an end. I hardly bypass my beliefs if I seek to deepen or intensify them by inducing appropriate feelings and attitudes toward my child. It is only if I ignore my beliefs, fail to acknowledge, or try to suppress conflicts among them, that I may be treating myself with disrespect.

VI. How the ability to regulate parental love pharmacologically affect the duty to love a child?

Even if we have a duty to love a child, we may be excused from fulfilling it if our best efforts to love a child are unavailing. Alternatively, our duty may only be to make our

best efforts. The availability of a pill may however limit our excuses by making our efforts more likely to succeed.

Of course, this does not mean that someone who is initially deficient in parental love must immediately take a pill. It is important to remember that when natural emotions and attitudes are not forthcoming, there are various other ‘low tech’ means of coaxing or evoking them, some of which I have discussed earlier. Those other means may be at least as effective as a pill, and have fewer of the moral risks outlined above. That said, we might sometimes find a pill more efficient than other means, or we might simply prefer a pill to those other means. In those circumstances, assuming that the conditions of authenticity are met, and that we are aware of the problems of narcissism and self-instrumentalization, it may well be acceptable to take a pill as means to discharge one’s duty to love a child. It may even be morally incumbent on us to do so if no other means of inducing parental love are effective.

VII. Conclusion

It may soon be possible to develop pills that allow parents to induce in themselves more loving behavior, attitudes and emotions towards their children. In this paper, I argued that pharmacologically-induced parental love can satisfy reasonable conditions of authenticity. I also explained why someone might want to take such a pill, and I claimed that inducing parental love pharmacologically need not promote narcissism or result in self-instrumentalization, although I recognize that these are significant concerns. Finally, I speculated about how the availability of such parental love pills may affect the duty to love a child. In particular, if parental love pills can help some parents love their children,

and if it is not necessarily morally problematic to use these pills, then the scope of our duties to children may be even more extensive than commonsense morality supposes.³²

³² I would like to thank Anders Sandberg, William Ruddick, Dale Jamieson, Wibke Gruetjen and audiences at the Center for Bioethics at New York University, and the Workshop on ‘Neuroenhancement of Mood’ at the Bioethics Institute Ghent, Belgium, for their helpful comments on earlier versions of this paper.