

Law and Human Flourishing: Happiness, Affective Neuroscience, and Paternalism

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This paper analyzes this question: in which decision-making environments, are there categories of paternalism that are justifiable by considerations of an individual's own ex post reported experienced happiness or subjective well-being? Recent affective neuroscientific data provides evidence of a disjunction between two brain systems: wanting and liking.¹ This gap between wanting and liking supplies a scientific language for normative and positive theories of paternalism.² There is a growing body of evidence that people make systematic mistakes in predictions about what will make them happy in the future.³ This paper examines policy consequences of such empirical findings in affective neuroscience, happiness research, and positive psychology for a recent debate among some behavioral economists and legal scholars about when and whether paternalism is desirable or justifiable.⁴ Much of this debate focuses on

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¹ Kent C. Berridge, *Pleasure, Unfelt Affect, and Irrational Desire*, in FEELINGS AND EMOTIONS 243 (Antony S.R. Manstead, Nico Frijda & Agneta Fischer eds., 2004); Kent C. Berridge, *Irrational Wanting and Subrational Liking: How Rudimentary Motivational and Affective Processes Shape Preferences and Choices*, 24 POL. PSYCHOL. 657 (2003); Kent C. Berridge, *Pleasure, Pain, Desire, and Dread: Hidden Core Processes of Emotion*, in WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY 525 (Daniel Kahneman, Ed Diener & Norbert Schwarz eds., 1999); Kent C. Berridge, *What is the Role of Dopamine in Reward: Hedonic Impact, Reward Learning, or Incentive Salience?*, 28 BRAIN RES. REV. 309 (1998); Kent C. Berridge, *Food Reward: Brain Substrates of Wanting and Liking*, 20 NEUROSCI. & BIOBEHAV. REVIEWS 1 (1996); Kent C. Berridge & Elliot S. Valenstein, *What Psychological Process Mediates Feeding Evoked By Electrical Stimulation of the Lateral Hypothalamus?*, 105 BEHAV. NEUROSCI. 3 (1991).

² Colin F. Camerer, *Wanting, Liking, and Learning: Speculations on Neuroscience and Paternalism*, 73 U. CHI. L. REV. 87 (2006) (proposing that mild forms of paternalism are justified if there is a gap between what people want and what people like).

³ Jeremy A. Blumenthal, *Law and the Emotions: The Problems of Affective Forecasting*, 80 IND. L.J. 155 (2005); DANIEL GILBERT, *STUMBLING ON HAPPINESS* (2006); and Bruno S. Frey & Alois Stutzer, *Mispredicting Utility and the Political Process*, in BEHAVIORAL PUBLIC FINANCE 113 (Edward J. McCafferey & Joel Slemrod eds., 2006).

⁴ See, e.g., Colin F. Camerer, et al., *Regulation for Conservatives: Behavioral Economics and the Case for "Asymmetric Paternalism,"* 151 U. PA. L. REV. 1211 (2003); Richard A. Epstein, *Behavioral Economics: Human Errors and Market Corrections*, 73 U. CHI. L. REV. 111 (2006); Edward L. Glaeser, *Paternalism and Psychology*, 73 U. CHI. L. REV. 133 (2006); Christine Jolls, Cass R. Sunstein, & Richard H. Thaler, *A Behavioral Approach to Law*

people being subject to cognitive biases and utilizing heuristics as rationales for some type of paternalism. A noteworthy exception to such cognitively-based paternalism is a recent consideration of emotional paternalism.⁵ Instead of stressing cognitive mechanisms of bounded rationality, this paper highlights alternative roles that affect, emotions, and moods play in helping or hindering learning and markets to close gaps between wanting and learning.

This research proposes that situations of judgment and decision-making (JDM) which present challenging learning environments (CLE), including but not limited to addiction resulting from cue-triggered decision processes;⁶ or decisions with irreversible consequences (DWIC) or very costly to reverse consequences, justify some type of paternalism. Examples of CLE or DWIC include choices about career, children, death, family, health, living wills, marriage, and retirement. An example of paternalism towards CLE or DWIC is that of parents engaging in paternalism, or parentalism, if they believe their children face CLE or DWIC, such as risk of permanent bodily injury, irreparable harm, or death. Mere repetition of CLE or DWIC does not ensure any mastery of relevant knowledge or skills.⁷ There are well-known cognitive limitations to learning,⁸ such as overcorrection;⁹ and also affective or emotional influences that can help or

and Economics, 50 STAN. L. REV. 1471 (1998); George Loewenstein & Ted O'Donoghue, "We Can Do This the Easy Way or the Hard Way": Negative Emotions, Self-Regulation, and the Law, 73 U. CHI. L. REV. 183 (2006); Jeffrey J. Rachlinski, *Cognitive Errors, Individual Differences, and Paternalism*, 73 U. CHI. L. REV. 207 (2006); Cass R. Sunstein & Richard H. Thaler, *Libertarian Paternalism Is Not an Oxymoron*, 70 U. CHI. L. REV. 1159 (2003); and Richard H. Thaler & Cass R. Sunstein, *Libertarian Paternalism*, 93 AM. ECON. REV. 175 (2003).

⁵ Jeremy A. Blumenthal, Emotional Paternalism, Mar. 2006, available at <http://ssrn.com/abstract=895187>.

⁶ B. Douglas Berheim & Antonio Rangel, *Addiction and Cue-Triggered Decision Processes*, 94 AM. ECON. REV. 1558 (2004).

⁷ Peter H. Huang, *Regulating Irrational Exuberance and Anxiety in Securities Markets*, in THE LAW AND ECONOMICS OF IRRATIONAL BEHAVIOR 501, 506 (Francesco Paresi & Vernon Smith eds., 2005) (explaining that "[a]s with Bill Murray's character, Phil, in the movie Groundhog Day (Columbia Pictures 1993), noiseless feedback and stationary environments promote learning effects").

⁸ See, e.g., Jeffrey J. Rachlinski, *The Uncertain Psychological Case for Paternalism*, 97 NW. L. REV. 1165, 1220-22 (2003) (describing some cognitive impediments to learning to make to make good decisions).

⁹ See, e.g., Ehud Guttel, *Overcorrection*, 93 GEO.L.J. 241, 246-50 (2004) (presenting a large number of studies demonstrating an overcorrection effect).

hinder learning.¹⁰ Other examples of paternalism are default rules, experimentation that is encouraged, forced, or subsidized by governments, and mandatory affective presentation styles for disclosure.

This Article acknowledges that paternalism can have affective benefits. In particular, people sometimes derive comfort from, prefer, or choose that other people or institutions eliminate, make, restrict, or suggest particular choices for them. For example, patients often enjoy the role of patients receiving care and guidance from physicians. This includes physicians themselves when they are seeking medical attention, guidance, and treatment from other physicians as patients themselves. Sometimes people enjoy being followers in certain situations. Thus, apprentices and athletes can enjoy guidance and instruction from their mentors and coaches, citizens may enjoy their government's charismatic leadership, employees might benefit from effective managers, members of a jury or team can like following their foreperson and team leader, and students can enjoy learning from teachers. This Article also considers affective costs of paternalism.¹¹ For example, paternalism can generate feelings of anxiety, frustration due to restrictions on autonomy, and learned helplessness.

Many Americans have anxieties about and difficulties with decisions, discussions and subjects that require some comfort and facility with numerical ability.¹² This discomfort with comprehending numbers has implications for decision making in many important contexts, including finances, health, and housing. In particular, most Americans do not have the requisite

¹⁰ See, e.g., Lauren G. Block & Patti Williams, *Undoing the Effects of Seizing and Freezing: Decreasing Defensive Processing of Personally Relevant Information*, 32 J. APPLIED SOC. PSYCHOL. 803 (2002) (providing advice to practitioners about how to design more effective health-related advertisements); Andrew Caplin & John Leahy, *Behavioral Policy*, in THE PSYCHOLOGY OF ECONOMIC DECISIONS: RATIONALITY AND WELL-BEING 73, 74-85 (Isabelle Brocas & Juan D. Carillo eds., 2003) (analyzing how anxiety affects learning by patients and savers); and Ed Glaeser, *Psychology and the Market*, 94 AM. ECON. REV. 408 (2004).

¹¹ George Loewenstein & Ted O'Donoghue, *"We Can Do This the Easy Way or the Hard Way": Negative Emotions, Self-Regulation and the Law*, 73 U. CHI. L. REV. 183 (2006).

¹² See generally JOHN ALLEN PAULOS, *INNUMERACY: MATHEMATICAL ILLITERACY AND ITS CONSEQUENCES* (2001).

abilities, experience, interest, knowledge, or skills to make optimal decisions and revisions about asset allocation for their retirement portfolios, or even who they should choose to consult with or hire as their financial advisors.

Recent experimental studies by psychologists Ellen Peters, Paul Slovic, and their co-authors demonstrate that less numerate individuals are more likely than more numerate people to be influenced by irrelevant affective sources, draw less precise and weaker affective meaning from numbers and numerical comparisons, and be susceptible to framing effects.¹³ These researchers also provide additional experimental evidence that manipulating affective meaning by changes in the format of presenting information influences how people construct preferences.¹⁴ They present and examine evidence for three functions of affect, namely as information, as a common currency, and as a motivator. An intriguing question these researchers consider in still other work is whether there are age differences in affective and deliberative information processing and decision-making.¹⁵

This paper also considers JDM that involves non-financial CLE or DWIC. A number of previous analyses of paternalistic interventions have already considered financial JDM,¹⁶ such as consumer choices,¹⁷ credit card usage,¹⁸ investing,¹⁹ and retirement savings planning.²⁰ To be

¹³ Ellen Peters et al., *Numeracy and Decision Making*, 17 PSYCHOL. SCI. 407 (2006).

¹⁴ Ellen Peters et al., *Bringing Meaning to Numbers: The Functions of Affect in Choice* (2006).

¹⁵ Ellen Peters et al., *Adult Age Differences in Dual Information Processes: Implications for the Role of Affective and Deliberative Processes in Older Adult's Decision Making* (2006).

¹⁶ See, e.g., Peter M. Demarzo et al., *Persuasion Bias, Social Influence, and Unidimensional Opinions*, 118 QUART. J. ECON. 909 (2003); Esther Duflo & Emmanuel Saez, *Participation and Investment Decisions in a Retirement Plan: The Influence of Colleagues' Choices*, 85 J. PUB. ECON. 121 (2002); Esther Duflo & Emmanuel Saez, *The Role of Information and Social Interactions in Retirement Plan Decisions: Evidence from A Randomized Experiment*, 118 QUART. J. ECON. 1007 (2003); Denis J. Hilton, *Psychology and the Financial Markets: Applications to Understanding and Remediating Irrational Decision-Making*, in THE PSYCHOLOGY OF ECONOMIC DECISIONS: RATIONALITY AND WELL-BEING 273 (Isabelle Brocas & Juan D. Carillo eds., 2003); Cass R. Sunstein, *What's Available? Social Influences and Behavioral Economics*, 97 NW. L. REV. 1295, 1298-1300, 1305-14 (2003) (describing in detail social influences on the flow of information).

¹⁷ Symposium, *Homo Economicus, Homo Myopicus, and the Law and Economics of Consumer Choice*, 73 U. CHI. L. REV. 3 (2006).

clear, there are justifiable reasons to be concerned about financial JDM, CLE, and DWIC. Recent empirical evidence found that heads of households with greater outstanding non-mortgage credit debt balances are significant more likely to report higher levels of psychological distress.²¹ Another study found credit card behavior to be associated with scores on the Frontal Lobe Personality Scale, which is a measure of personality and behavioral traits associated with frontal cortex dysfunction.²² Finally, recent experimental evidence found that debt consolidation loans can undermine bankruptcy risk perceptions and increase people's intentions to engage in such risky financial behavior as credit card (mis)use.²³

There are many degrees and varieties of paternalism towards JDM. On the one hand, traditional examples of heavy-handed paternalism include bans, mandates, prohibitions, price ceilings or floors, and non-price quantity rationing. Instances of such heavy-handed paternalism are laws banning using cocaine; mandating wearing of automobile seat-belts or motorcycle helmets; prohibiting alcohol consumption; capping interest rates or setting minimum wages; and rationing gasoline purchases based upon the parity (evenness or oddness) of car license plates. All these cases of heavy-handed paternalism entail binding restrictions over the set of available choices people face. Heavy-handed and visible-handed paternalism stands in stark contrast with

¹⁸ See, e.g., Samuel Issacharoff, *Credit Card Accountability*, 73 U. CHI. L. REV. 157 (2006). See also Tom Brown & Lacey Plache, *Paying with Plastic: Maybe Not So Crazy after All*, 73 U. CHI. L. REV. 63 (2006).

¹⁹ Peter H. Huang, *Moody Investing and the Supreme Court: Rethinking Materiality of Information and Reasonableness of Investors*, 13 SUP. CT. ECON. REV. 99 (2005); Peter H. Huang, *Regulating Irrational Exuberance and Anxiety in Securities Markets*, in THE LAW AND ECONOMICS OF IRRATIONAL BEHAVIOR 501 (Francesco Paresi & Vernon Smith eds., 2005).

²⁰ See, e.g., John Ameriks, Andrew & John Leahy, *Wealth Accumulation and the Propensity to Plan*, 118 Q. J. ECON. 1007 (2003); Henrik Cronqvist & Richard H. Thaler, *Design Choices in Privatized Social-Security Systems: Learning from the Swedish Experience*, 94 AM. ECON. REV. 424 (2003); Shlomo Benartzi & Richard H. Thaler, *How Much is Investor Autonomy Worth?*, 57 J. FIN. 1593 (2003).

²¹ Sarah Brown et al., *Debt and Distress: Evaluating the Psychological Costs of Credit*, 26 J. ECON. PSYCHOL. 642 (2005).

²² Marcello Spinella et al., *Predicting Credit Card Behavior: A Study in Neuroeconomics*, 100 PERPETUAL & MOTOR SKILLS 777 (2005).

²³ Lisa E. Bolton et al., *Does Marketing Products as Remedies Create "Get Out of Jail Free Cards"?*, 33 J. CONSUMER RES. 71 (2006).

Adam Smith's famous metaphor of an invisible hand for a system of perfectly competitive markets guiding decentralized choices of individuals pursuing their self-interest into an outcome that is normatively and socially desirable in a precise and technical, but limited sense.²⁴

On another hand, several economists and legal scholars have recently defined various forms of light-handed paternalism, including anti-antipaternalism,²⁵ asymmetric paternalism,²⁶ ("uneven-handed paternalism"?) that is also known as cautious paternalism,²⁷ libertarian paternalism,²⁸ weak paternalism,²⁹ and soft paternalism.³⁰ Anti-antipaternalism is "skepticism about antipaternalism, but not an affirmative defense of paternalism."³¹ Asymmetric paternalism "creates large benefits for those who make errors, while imposing little or no harm on those who are fully rational."³² Libertarian paternalism is "an approach that preserves freedom of choice but that authorizes both private and public institutions to steer people in directions that will promote their welfare."³³ Weak paternalism entails minimal interference with choice and includes

²⁴ ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS Book Four, Chapter 2 (1776). See also Kenneth Joseph Arrow & Gerard Debreu, *Existence of an Equilibrium for a Competitive Economy*, 22 *ECONOMETRICA* 265 (1954) (providing their pioneering model of a general equilibrium and proving that under certain hypotheses, a competitive general equilibrium allocation exists and is Pareto efficient).

²⁵ Christine Jolls, Cass R. Sunstein & Richard H. Thaler, *A Behavioral Approach to Law and Economics*, 50 *STAN. L. REV.* 1471, 1541-45 (1996).

²⁶ Colin Camerer, Samuel Issacharoff, George Loewenstein, Ted O'Donoghue & Matthew Rabin, *Regulation for Conservatives: Behavioral Economics and the Case for "Asymmetric Paternalism"*, 151 *U. PA. L. REV.* 1211 (2003).

²⁷ Ted O'Donoghue & Matthew Rabin, *Procrastination in Preparing for Retirement*, in *BEHAVIORAL DIMENSIONS OF RETIREMENT ECONOMICS* 125, 150 (Henry J. Aaron ed., 1999); Ted O'Donoghue & Matthew Rabin, *Risky Behavior Among Youths: Some Issues from Behavioral Economics*, in *RISKY BEHAVIOR AMONG YOUTHS: AN ECONOMIC ANALYSIS* 29, 31 (Jonathan Gruber ed., 2001).

²⁸ Cass R. Sunstein & Richard H. Thaler, *Libertarian Paternalism Is Not An Oxymoron*, 70 *U. CHI. L. REV.* 1159 (2004); Richard H. Thaler & Cass R. Sunstein, *Libertarian Paternalism*, 93 *AM. ECON. REV.* 175 (2003).

²⁹ Cass R. Sunstein, *Boundedly Rational Borrowing*, 7? *U. CHI. L. REV.* ? (2006).

³⁰ Glaeser, *supra* note 4.

³¹ Jolls, Sunstein & Thaler, *supra* note 25, at 206.

³² Camerer, Issacharoff, Loewenstein, O'Donoghue & Rabin, *supra* note 26, at 1212.

³³ Thaler & Sunstein, *supra* note 28, at 179.

asymmetric paternalism, libertarian paternalism, and debiasing.³⁴ Soft paternalism does not directly restrict individuals' choice sets.³⁵

Building on recent neuroscientific evidence of distinct “wanting” and “liking” systems in human (and mice) brains;³⁶ behavioral economist Camerer introduced a framework distinguishing between human wanting, liking, and learning.³⁷ This generalization of neoclassical economics' revealed preference theory (which is a special case of learning having already successfully taught wanting what is liked) provides a scientific language for normative and positive analyses of paternalism. Because what an individual wants can differ from what an individual likes, the wanting system of an individual's brain can impose an “internality” on the liking system of that same individual's brain (and possibly vice versa to the extent that an individual's brain's liking system can exercise control over that individual's brain's wanting system). These self-imposed “internalities” are analogous to traditional externalities and provide paternalistic justifications for interventions that are analogous to non-paternalistic justifications for interventions that correct for non-existence of certain markets.

If there is an accurately and objectively verifiable gap between wanting and liking that learning and markets do not close, then some type of state paternalistic intervention might be justified if that did not cause any other harm. Professor Camerer provided such examples of possibly justifiable forms of paternalistic intervention as calibrating, delegating choice, dramatizing, licensing, and promoting learning. Under what circumstances do learning and markets not close a gap between what someone wants and what someone likes? If there is noisy

³⁴ Christine Jolls & Cass R. Sunstein, *Debiasing Through Law*, 35 J. LEGAL STUD. 199 (2006).

³⁵ Glaeser, *supra* note 4.

³⁶ Kent C. Berridge & Terry Robinson, *Parsing Reward*, 26 TRENDS IN NEUROSCIENCES 507 (Sept. 2003); Kent C. Berridge et al., *Sequential Super-Stereotypy of an Instinctive Fixed Action Pattern in Hyper-Dopamine Mutant Mice: A Model of Obsessive Compulsive Disorder and Tourette's*, 3 BMC BIOLOGY 4 (2005); Susana Pecina et al., *Hyperdopaminergic Mutant Mice have Higher “Wanting” But Not “Liking” for Sweet Rewards*, 23 J. NEUROSCI. 9395 (2003).

³⁷ Camerer, *supra* note 2.

feedback, non-stationarity, or endogeneity about what is being learned, then learning to improve judgment and decision making is difficult, if not impossible. Even if we do learn to improve our judgment and decision making, that learning just may be too slow for us to benefit from because as macroeconomist, Lord John Maynard Keynes famously wrote, “in the long run, we are all dead.”³⁸

In particular, for CLE or DWIC, any learning that people succeed in achieving over the privately undesirable consequences of their judgment and decision making is likely to be too late (or very costly) for them to reverse. Such activities include choosing spouses and partners; deciding on careers; (over- or under-) eating; engaging in sex; exercising; reproducing; and schooling. Existing and possible legal paternalistic interventions that respond to the above instances of DWIC include respectively: cooling-off periods for marriage and divorce, pre-marital counseling, couples counseling, and pre-divorce counseling; career sampling, job rotation and vocational counseling; nutritional counseling and labeling; birth control and sex education; health and physical fitness information campaigns; parenting licensing;³⁹ and educational advising.

It helps to clarify our discussion of paternalism if we are careful to distinguish between two aspects of any paternalistic intervention: first, a justification explaining how intervention with private decisions makes people better off (according to those people) or protects them from harms (again recognized by those people) and second, a specific method of intervention. This

³⁸ JOHN MAYNARD KEYNES, A TRACT ON MONETARY REFORM ? (1923).

³⁹ David T. Lykken, *Want to Have a Baby? Not Until You Get Your License!*, L. & POL., Dec. 1995, at 17; David T. Lykken, *Licensing Parents*, NEWSDAY, Nov. 19, 1995, at A48; David T. Lykken, *Incompetent Parenting: Its Causes and Cures*, 27 CHILD PSYCHIATRY & HUM. DEV. 129 (1997); David T. Lykken, *Factory of Crime*, 8 PSYCHOL. INQUIRY 261, 268-69 (1997); David T. Lykken, *The Case for Parental Licensure*, in PSYCHOPATHY: ANTISOCIAL, CRIMINAL, AND VIOLENT BEHAVIOR 122 (Theodore Millon et al. eds. 1998); David T. Lykken, *The Causes and Consequences of Crime and A Controversial Cure*, 68 J. PERSONALITY 559 (2000); David T. Lykken, *Licensing Parents: A Reply to Critics*, 68 J. PERSONALITY 639 (2000); David T. Lykken, *Parental Licensure*, 56 AM. PSYCHOL. 883 (2001).

perspective towards paternalism decouples justifications for paternalism from paternalistic interventions. A particular justification for paternalism could apply to some people, but not others. A specific justification for paternalism will apply to some methods of intervention, but not others. A method of intervention will be warranted by some justifications, but not others. Finally, a method of intervention justifiable by paternalistic reasons might also be justifiable by non-paternalistic reasons, including asymmetric information, equity or fairness, externalities, incomplete markets, market power, and public goods.

A counterargument against paternalism even for cases CLE including DWIC can be founded upon empirical and experimental psychological evidence of people's (un-self-recognized) capacity to adapt themselves or their preferences to most situations.⁴⁰ But a genuine question remains as which preferences a policy maker should utilize to evaluate outcomes.⁴¹ Another counterargument against paternalism is that however well-intentioned, the practice of paternalism itself inhibits opportunities for developing skills for decision making in those who are protected from themselves.⁴² But such a counterargument assumes that people will benefit from having opportunities for developing their decision-making skills and that more such opportunities are better than fewer such opportunities. People may not desire to learn even if they would enjoy or like the learning experience. Alternatively, people may want learning opportunities but it may just happen that people would not enjoy those learning experiences. How affect and learning are interrelated affects whether people will be able to benefit from opportunities to learn better decision making skills and how those opportunities can be designed to better facilitate learning.

As mentioned previously, most of the recent legal debate over paternalism has emphasized cognitive biases and heuristics by which humans often err in their JDM. An often-

⁴⁰ Samuel R. Bagenstos & Margo Schlanger, *Hedonic Damages, Hedonic Adaptation, and Disability*, 60 VAND. L. Rev. ? (2007).

⁴¹ Brett H. McDonnell, *Endogenous Preferences and Welfare Evaluations*, University of Minnesota Law School Legal Studies Research Paper No. 06-50 (2006).

⁴² Jonathan Klick & Gregory Mitchell, *Government Regulation of Irrationality: Moral and Cognitive Hazards*, 90 MINN. L. Rev. 1620 (2006).

heard response to people suffering from biases in their decision-making is that others who do not suffer from such JDM biases can profit from and in so doing correct such mistakes. As 1972 Nobel Laureate in Economics,⁴³ Kenneth Joseph Arrow cogently expressed:

Any argument seeking to establish the presence of irrational economic behavior always meets a standard counterargument: if most agents are irrational, then a rational individual can make it a lot of money; eventually, therefore, the rational individuals will take over all the wealth. Hence, rational behavior will be the effective norm. There are two rebuttals to the counterargument: (1) Not all arbitrage possibilities exist. For example, corporate profits, even though down, are very distinctly positive in real terms, after all necessary adjustments, including taxes. Yet there seems no way by which the average investor in corporate securities can get a positive real rate of return. (2) More important, if everyone else is “irrational,” it by no means follows that one can make money by being rational, at least in the short run. With discounting, even eventual success may not be worthwhile. Consider for example a firm that engages in research and development which depresses the current profit and loss statement. Irrational investors look only at this information, and therefore the price of the stock is below the expected value of future dividends based on the profitable outcomes of the research and development. In a perfectly working market with rational individuals, stock prices would gradually rise as the realization date approaches, but prices in the actual market would be constant. A rational investor would understand the future value of the stocks, but he or she could not realize any part of the gain during the gestation period. While the rational investor may get rewarded eventually if the stock is half long enough, he or she is losing liquidity during an intervening period which may be long. Hence, the demand for the stock even by the rational buyers will be depressed. As Keynes argued long ago, the value of a security depends in good measure on other people’s opinions.⁴⁴

As this passage argues, arbitrage and more generally learning to correct errors in JDM takes time and costs resources. This paper adds that people’s affect matters to whether they learn and how quickly they learn if they do learn. Paternalism can be directed at helping people learn better or faster when learning is possible. But what if some people just find learning too difficult, taxing, or unpleasant? Also, due to benefits from comparative advantage and specialization, people who have difficulty learning certain decision making skills might be better off delegating those or getting help with decisions involving those difficult-to-learn decision making skills and learning other decision making skills they find easier to learn.

⁴³ http://nobelprize.org/nobel_prizes/economics/laureates/1972/index.html.

⁴⁴ Kenneth J. Arrow, *Risk Perception in Psychology and Economics*, 29 *ECON. INQUIRY* 1, 7-8 (1982).