

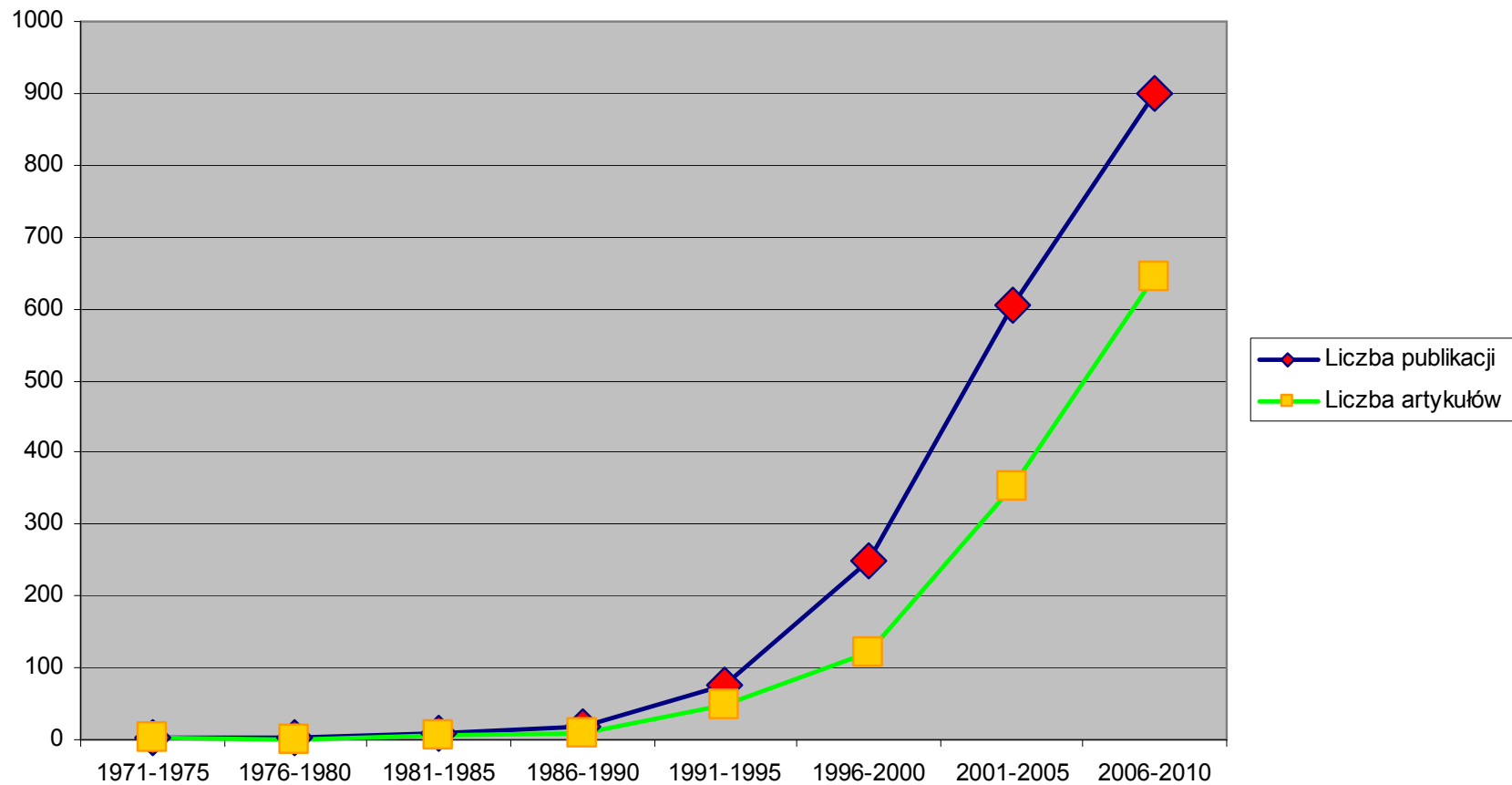
Znaczenie myślenia ewolucyjnego we współczesnej psychologii

Łukasz Budzicz

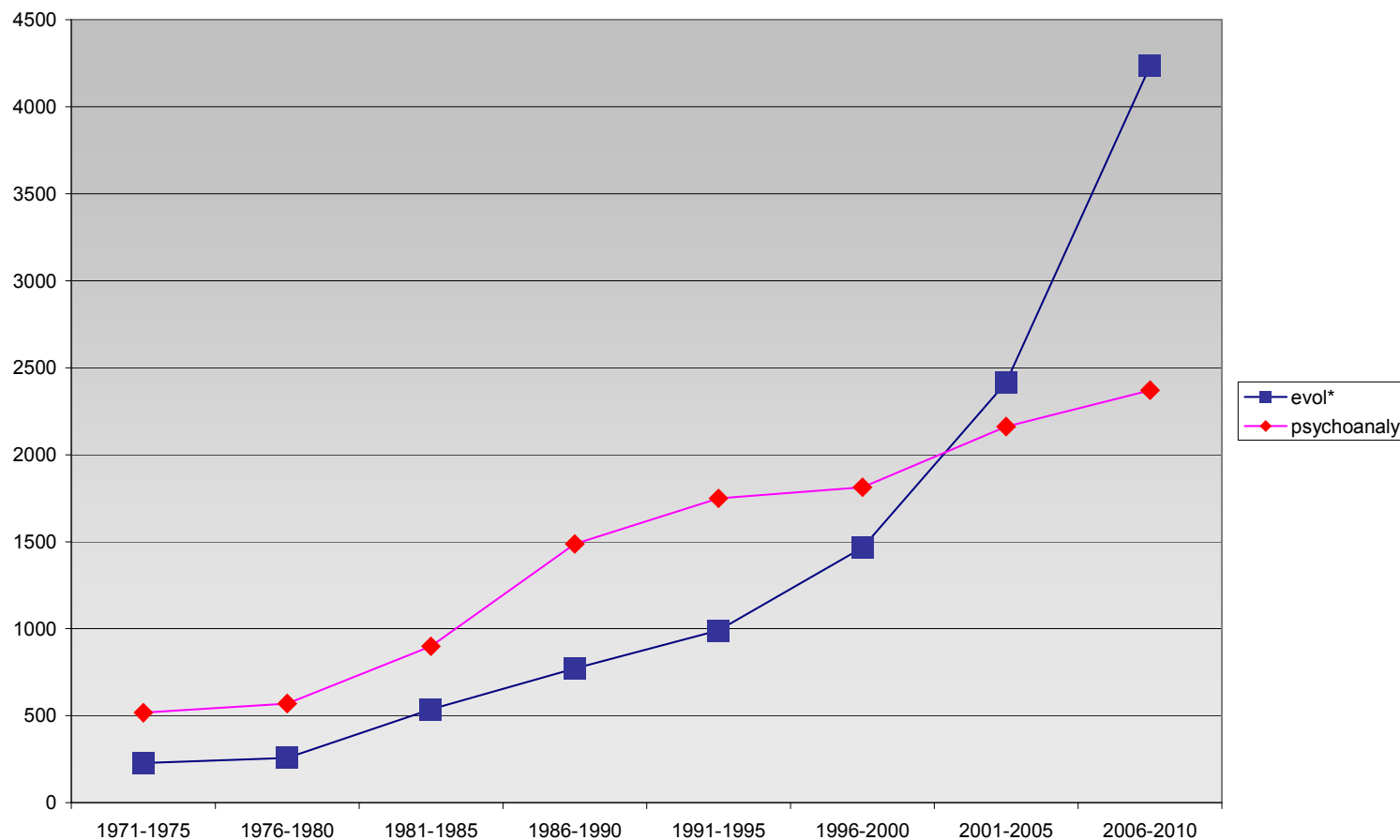


Jakościowe i ilościowe dowody na znaczenie myślenia ewolucyjnego

Liczba nowych publikacji ze słowami „evolutionary psychology” lub „evolutionary psychological” w tytule, abstrakcie lub słowach kluczowych w bazie PsycINFO



Średnia liczba nowych pozycji rocznie w PsycINFO ze słowem „evol*” i „psychoanaly*” w abstrakcie, tytule lub słowach kluczowych

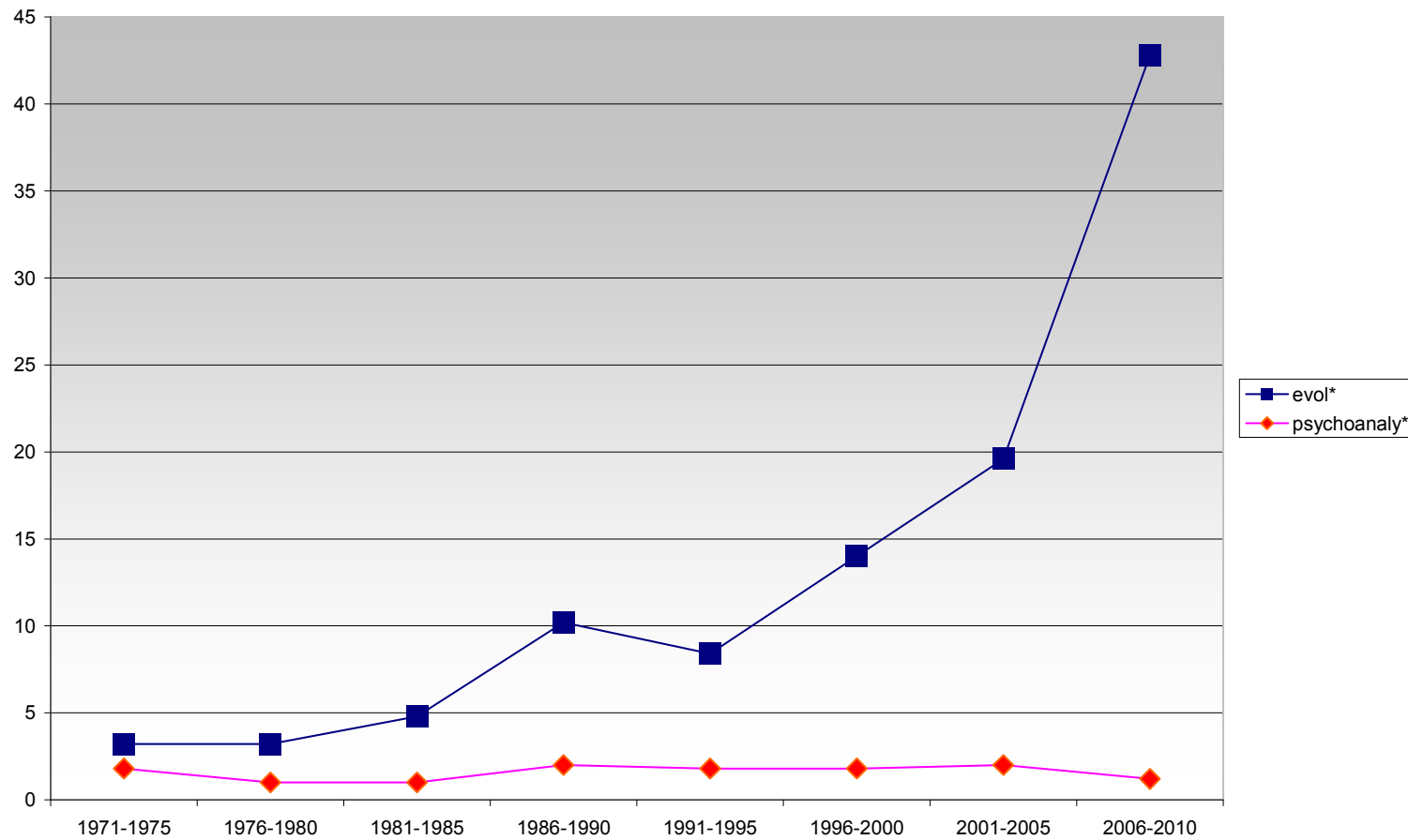


Lista 16 czasopism



- (ps. rozwojowa) *Journal of Child Psychology and Psychiatry, Child Development, Developmental Science, Developmental Psychology*
- (ps. osobowości) *Journal of Personality, European Journal of Personality, Personality and Individual Differences, Journal of Research in Personality*
- (ps. społeczna) *Journal of Personality and Social Psychology, Personality and Social Psychology Bulletin, Journal of Experimental Social Psychology, British Journal of Social Psychology*
- (ps. poznawcza) *Journal of Experimental Psychology: General, Journal of Memory and Language, Cognitive Psychology, Cognition*

Średnia liczba nowych artykułów rocznie w 16 czasopismach poświęconych badaniom podstawowym ze słowami „evol*” lub „psychoanaly*” w tytule, abstrakcie lub słowach kluczowych



Średnia liczba nowych artykułów rocznie w 16 czasopismach poświęconych badaniom podstawowym ze słowami „evol*” lub „psychoanaly*” w tytule, abstrakcie lub słowach kluczowych



- 2011-2014: 59
- 2015: 70

Wydania specjalne czasopism



CZASOPISMO (IMPACT FACTOR)	TYTUŁ SPECJALNEGO WYDANIA
Addiction (4,14)	(2002) Evolutionary approaches to addiction
Acta Psychologica Sinica	(2007) Evolutionary Psychology
Aggression and Violent Behavior (1,40)	(2011) Evolutionary Approaches to Explaining Violence
Annals of the New York Academy of Sciences (2,67)	(2000) Evolutionary Perspectives on Human Reproductive Behaviour
Appetite (2,43)	(2006) Evolutionary perspectives on overeating and overweight
Cross-Cultural Research (0,64)	(2007 i 2008) Evolutionary Approaches in Cross-Cultural Studies
Developmental Review (3,22)	(2006) Evolutionary Developmental Psychology
Educational Psychologist (1,72)	(2008) Evolution and the Educated Species
Human Nature (1,91)	(2009) Gender Inequalities in Evolutionary Perspective;
	(2008) Evolutionary cognitive neuroscience
	(2009) Evolutionary studies of cooperation

Wydania specjalne czasopism



CZASOPISMO (IMPACT FACTOR)	TYTUŁ SPECJALNEGO WYDANIA
Group Dynamics (0,89)	(2008) Evolutionary approaches to group dynamics
Journal of Economic Behavior & Organization (0,92)	(2011) Emotions, Natural Selection and Rationality
Journal of Experimental Child Psychology (2,26)	(2003) Evolutionary Developmental Psychology
Journal of Psychology and Human Sexuality (0,61)	(2009) Evolutionary Psychology and Human Sexuality
Learning and Individual Differences (1,52)	(2000) Evolutionary Educational Psychology
Managerial and Decision Economics	(2006) Evolutionary Psychology in the Study of Management
New Ideas in Psychology (1,06)	(2008) Integrating development and evolution in psychology
Psicothema (0,93)	(2010) Evolutionary Psychology
Religion	(2011) Evolutionary Approaches to the Study of Religion
Sex Roles (1,21)	(2011) Feminism and evolutionary psychology

Artykuły przeglądowe i teoretyczne z perspektywą ewolucyjną



- *Behavioral and Brain Sciences*
- *American Psychologist*
- *Annual Review of Psychology*
- *Psychological Bulletin*
- *Psychological Review*
- *Perspectives on Psychological Science*
- *Review of General Psychology*

Artykuły przeglądowe i teoretyczne z perspektywą ewolucyjną



Atrakcyjność fizyczna	Rhodes, G. (2006). The evolutionary psychology of facial beauty. <i>Annual Review Of Psychology</i> , 57, 199-226. Gallup, G. r., & Frederick, D. A. (2010). The science of sex appeal: An evolutionary perspective. <i>Review Of General Psychology</i> , 14(3), 240-250. Weeden, J., & Sabini, J. (2005). Physical Attractiveness and Health in Western Societies: A Review. <i>Psychological Bulletin</i> , 131(5), 635-653.
Dojrzewanie płciowe a wczesnodziecięce stresory u kobiet	Ellis, B. J. (2004). Timing of Pubertal Maturation in Girls: An Integrated Life History Approach. <i>Psychological Bulletin</i> , 130(6), 920-958.
Edukacja matematyczna	Geary, D. C. (1995). Reflections of evolution and culture in children's cognition: Implications for mathematical development and instruction. <i>American Psychologist</i> , 50(1), 24-37.
Empatia	de Waal, F. M. (2008). Putting the Altruism Back into Altruism: The Evolution of Empathy. <i>Annual Review Of Psychology</i> , 59, 279-300. Preston, S. D., & de Waal, F. M. (2002). Empathy: Its ultimate and proximate bases. <i>Behavioral And Brain Sciences</i> , 25(1), 1-20.
Emocje	Vaish, A., Grossmann, T., & Woodward, A. (2008). Not all emotions are created equal: The negativity bias in social-emotional development. <i>Psychological Bulletin</i> , 134(3), 383-403.
Inteligencja	Kanazawa, S. (2004). General Intelligence as a Domain-Specific Adaptation. <i>Psychological Review</i> , 111(2), 512-523. Woodley, M. A. (2011). The cognitive differentiation-integration effort hypothesis: A synthesis between the fitness indicator and life history models of human intelligence. <i>Review Of General Psychology</i> , 15(3), 228-245.
Gwałt	McKibbin, W. F., Shackelford, T. K., Goetz, A. T., & Starratt, V. G. (2008). Why do men rape? An evolutionary psychological perspective. <i>Review Of General Psychology</i> , 12(1), 86-97.
Interwencje w organizacji	Colarelli, S. M. (1998). Psychological interventions in organizations: An evolutionary perspective. <i>American Psychologist</i> , 53(9), 1044-1056.
Język	Arbib, M. A. (2005). From monkey-like action recognition to human language: An evolutionary framework for neurolinguistics. <i>Behavioral And Brain Sciences</i> , 28(2), 105-167.

Artykuły przeglądowe i teoretyczne z perspektywą ewolucyjną



Konflikt rodzic-potomstwo	<p>Schlomer, G. L., Del Giudice, M., & Ellis, B. J. (2011). Parent-offspring conflict theory: An evolutionary framework for understanding conflict within human families. <i>Psychological Review</i>, 118(3), 496-521.</p> <p>Buunk, A. P., Park, J. H., & Dubbs, S. L. (2008). Parent-offspring conflict in mate preferences. <i>Review Of General Psychology</i>, 12(1), 47-62.</p>
Kultura	<p>Mesoudi, A. (2009). How cultural evolutionary theory can inform social psychology and vice versa. <i>Psychological Review</i>, 116(4), 929-952.</p> <p>Mesoudi, A., Whiten, A., & Laland, K. N. (2006). Towards a unified science of cultural evolution. <i>Behavioral And Brain Sciences</i>, 29(4), 329-383.</p> <p>Tomasello, M., Carpenter, M., Call, J., Behne, T., & Moll, H. (2005). Understanding and sharing intentions: The origins of cultural cognition. <i>Behavioral And Brain Sciences</i>, 28(5), 675-735.</p>
Makiawelizm	<p>Wilson, D., Near, D., & Miller, R. R. (1996). Machiavellianism: A synthesis of the evolutionary and psychological literatures. <i>Psychological Bulletin</i>, 119(2), 285-299.</p>
Moralność	<p>Krebs, D. L. (2008). Morality: An evolutionary account. <i>Perspectives On Psychological Science</i>, 3(3), 149-172.</p>
Motywacja	<p>Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. <i>Perspectives On Psychological Science</i>, 5(3), 292-314.</p>
Obraz własnego ciała u kobiet	<p>Ferguson, C. J., Winegard, B., & Winegard, B. M. (2011). Who is the fairest one of all? How evolution guides peer and media influences on female body dissatisfaction. <i>Review Of General Psychology</i>, 15(1), 11-28.</p>
Odrzucenie	<p>MacDonald, G., & Leary, M. R. (2005). Why Does Social Exclusion Hurt? The Relationship Between Social and Physical Pain. <i>Psychological Bulletin</i>, 131(2), 202-223.</p>
Osobowość	<p>Buss, D. M. (2009). How can evolutionary psychology successfully explain personality and individual differences?. <i>Perspectives On Psychological Science</i>, 4(4), 359-366.</p> <p>Gosling, S. D. (2001). From mice to men: What can we learn about personality from animal research?. <i>Psychological Bulletin</i>, 127(1), 45-86.</p> <p>Nettle, D. (2006). The evolution of personality variation in humans and other animals. <i>American Psychologist</i>, 61(6), 622-631.</p>

Artykuły przeglądowe i teoretyczne z perspektywą ewolucyjną



Podejmowanie decyzji	<p>Kenrick, D. T., Li, N. P., & Butner, J. (2003). Dynamical evolutionary psychology: Individual decision rules and emergent social norms. <i>Psychological Review</i>, 110(1), 3-28.</p> <p>Cooper, W. S. (1987). Decision theory as a branch of evolutionary theory: A biological derivation of the savage axioms. <i>Psychological Review</i>, 94(4), 395-411.</p> <p>Klein, S. B., Cosmides, L., Tooby, J., & Chance, S. (2002). Decisions and the evolution of memory: Multiple systems, multiple functions. <i>Psychological Review</i>, 109(2), 306-329.</p>
Pamięć	<p>Sherry, D. F., & Schacter, D. L. (1987). The evolution of multiple memory systems. <i>Psychological Review</i>, 94(4), 439-454.</p>
Plotki	<p>Dunbar, R. M. (2004). Gossip in Evolutionary Perspective. <i>Review Of General Psychology</i>, 8(2), 100-110.</p>
Poznawcze przetwarzanie twarzy	<p>Pascalis, O., & Kelly, D. J. (2009). The origins of face processing in humans: Phylogeny and ontogeny. <i>Perspectives On Psychological Science</i>, 4(2), 200-209.</p>
Przemoc, ludobójstwo, wojna	<p>Liddle, J. R., Shackelford, T. K., & Weekes-Shackelford, V. A. (2012). Why can't we all just get along? Evolutionary perspectives on violence, homicide, and war. <i>Review Of General Psychology</i>, 16(1), 24-36.</p>
Przemoc domowa	<p>Kaighobadi, F., Shackelford, T. K., & Goetz, A. T. (2009). From mate retention to murder: Evolutionary psychological perspectives on men's partner-directed violence. <i>Review Of General Psychology</i>, 13(4), 327-334.</p>
Przywiązanie	<p>Ein-Dor, T., Mikulincer, M., Doron, G., & Shaver, P. R. (2010). The attachment paradox: How can so many of us (the insecure ones) have no adaptive advantages?. <i>Perspectives On Psychological Science</i>, 5(2), 123-141.</p> <p>Del Giudice, M. (2009). Sex, attachment, and the development of reproductive strategies. <i>Behavioral And Brain Sciences</i>, 32(1), 1-21.</p>
Przywództwo	<p>van Vugt, M., Hogan, R., & Kaiser, R. B. (2008). Leadership, Followership, and Evolution: Some Lessons From the Past. <i>American Psychologist</i>, 63(3), 182-196.</p>

Artykuły przeglądowe i teoretyczne z perspektywą ewolucyjną



Psychologia kliniczna i choroby psychiczne	<p>Siebert, R. J., & Ward, T. (2002). Clinical psychology and evolutionary psychology: Toward a dialogue. <i>Review Of General Psychology, 6</i>(3), 235-259.</p> <p>Crespi, B., & Badcock, C. (2008). Psychosis and autism as diametrical disorders of the social brain. <i>Behavioral And Brain Sciences, 31</i>(3), 241-261.</p> <p>Keller, M. C., & Miller, G. (2006). Resolving the paradox of common, harmful, heritable mental disorders: Which evolutionary genetic models work best?. <i>Behavioral And Brain Sciences, 29</i>(4), 385-452.</p> <p>Burns, J. (2004). An evolutionary theory of schizophrenia: Cortical connectivity, metarepresentation, and the social brain. <i>Behavioral And Brain Sciences, 27</i>(6), 831-885.</p> <p>Öhman, A., & Mineka, S. (2001). Fears, phobias, and preparedness: Toward an evolved module of fear and fear learning. <i>Psychological Review, 108</i>(3), 483-522.</p> <p>Allen, N. B., & Badcock, P. T. (2003). The Social Risk Hypothesis of Depressed Mood: Evolutionary, Psychosocial, and Neurobiological Perspectives. <i>Psychological Bulletin, 129</i>(6), 887-913.</p> <p>Mealey, L. (1995). The sociobiology of sociopathy: An integrated evolutionary model. <i>Behavioral And Brain Sciences, 18</i>(3), 523-599.</p>
Rytuály	<p>Boyer, P., & Liénard, P. (2006). Why ritualized behavior? Precaution systems and action parsing in developmental, pathological and cultural rituals. <i>Behavioral And Brain Sciences, 29</i>(6), 595-613.</p>
Samokontrola	<p>Bjorklund, D. F., & Kipp, K. (1996). Parental investment theory and gender differences in the evolution of inhibition mechanisms. <i>Psychological Bulletin, 120</i>(2), 163-188.</p>
Samooszukiwanie	<p>von Hippel, W., & Trivers, R. (2011). The evolution and psychology of self-deception. <i>Behavioral And Brain Sciences, 34</i>(1), 1-16.</p>
Stygmatyzacja	<p>Kurzban, R., & Leary, M. R. (2001). Evolutionary origins of stigmatization: The functions of social exclusion. <i>Psychological Bulletin, 127</i>(2), 187-208.</p>
Szczęście	<p>Buss, D. M. (2000). The evolution of happiness. <i>American Psychologist, 55</i>(1), 15-23.</p>

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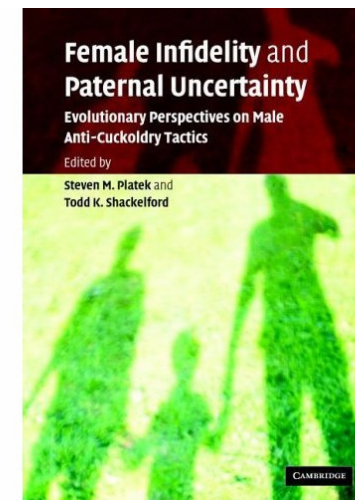
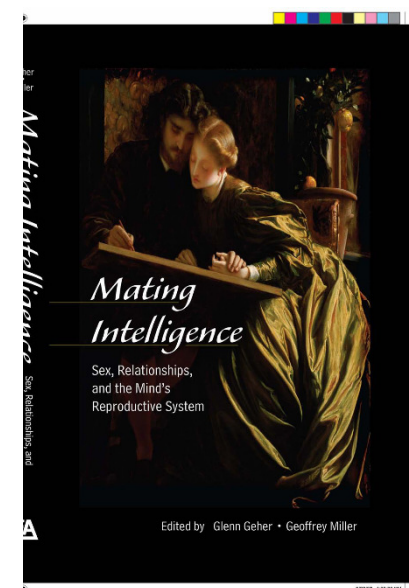
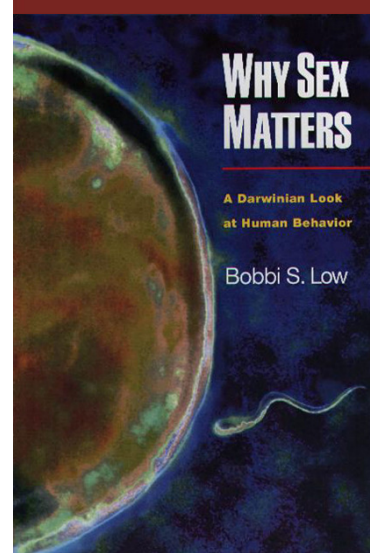
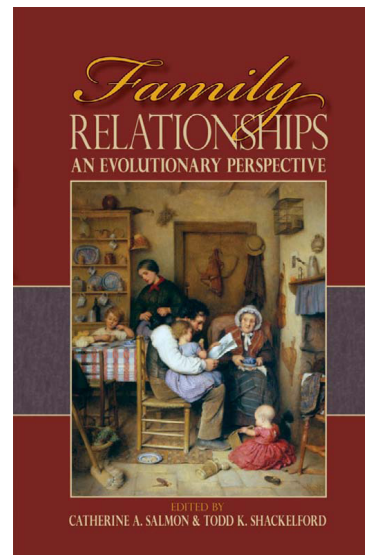
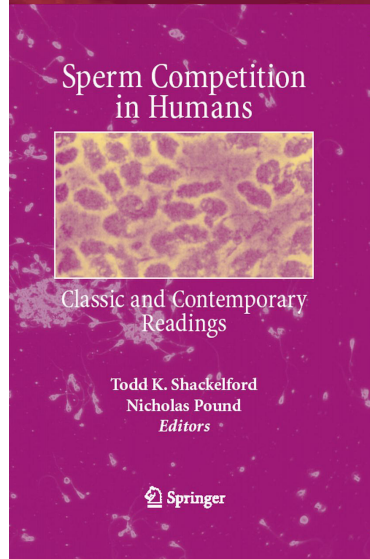
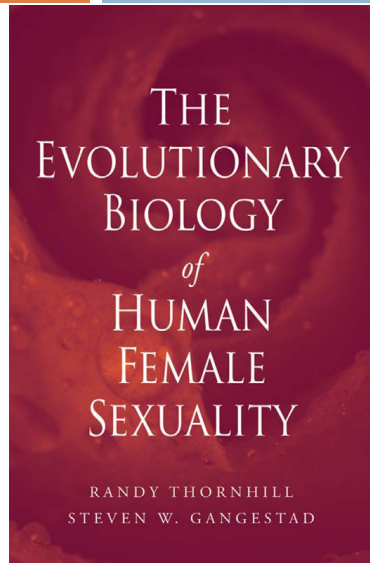
Świadomość	<p>Baumeister, R. F., & Masicampo, E. J. (2010). Conscious thought is for facilitating social and cultural interactions: How mental simulations serve the animal-culture interface. <i>Psychological Review</i>, 117(3), 945-971.</p> <p>Bering, J. M., & Shackelford, T. K. (2004). The Causal Role of Consciousness: A Conceptual Addendum to Human Evolutionary Psychology. <i>Review Of General Psychology</i>, 8(4), 227-248.</p> <p>Henriques, G. (2003). The tree of knowledge system and the theoretical unification of psychology. <i>Review Of General Psychology</i>, 7(2), 150-182.</p>
Umysł	<p>Geary, D. C., & Huffman, K. J. (2002). Brain and cognitive evolution: Forms of modularity and functions of mind. <i>Psychological Bulletin</i>, 128(5), 667-698.</p> <p>Barrett, H., & Kurzban, R. (2006). Modularity in cognition: Framing the debate. <i>Psychological Review</i>, 113(3), 628-647.</p>
Wierzenia religijne	<p>Bering, J. M. (2006). The folk psychology of souls. <i>Behavioral And Brain Sciences</i>, 29(5), 453-462.</p> <p>Atran, S., & Norenzayan, A. (2004). Religion's evolutionary landscape: Counterintuition, commitment, compassion, communion. <i>Behavioral And Brain Sciences</i>, 27(6), 713-770.</p>
Współczucie	<p>Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. <i>Psychological Bulletin</i>, 136(3), 351-374.</p>
Związki intymne	<p>Roberts, S., Miner, E. J., & Shackelford, T. K. (2010). The future of an applied evolutionary psychology for human partnerships. <i>Review Of General Psychology</i>, 14(4), 318-329.</p> <p>Buss, D. M., & Schmitt, D. P. (1993). Sexual Strategies Theory: An evolutionary perspective on human mating. <i>Psychological Review</i>, 100(2), 204-232.</p> <p>Eastwick, P. W. (2009). Beyond the pleistocene: Using phylogeny and constraint to inform the evolutionary psychology of human mating. <i>Psychological Bulletin</i>, 135(5), 794-821.</p> <p>Schmitt, D. P. (2005). Sociosexuality from Argentina to Zimbabwe: A 48-nation study of sex, culture, and strategies of human mating. <i>Behavioral And Brain Sciences</i>, 28(2), 247-311.</p>
Związki rodzinne	<p>Gorelik, G., Shackelford, T. K., & Salmon, C. A. (2010). New horizons in the evolutionary science of the human family. <i>Review Of General Psychology</i>, 14(4), 330-339.</p> <p>Geary, D. C. (2000). Evolution and proximate expression of human paternal investment. <i>Psychological Bulletin</i>, 126(1), 55-77.</p> <p>Coall, D. A., & Hertwig, R. (2010). Grandparental investment: Past, present, and future. <i>Behavioral And Brain Sciences</i>, 33(1), 1-19.</p>

Uznane wydawnictwa naukowe

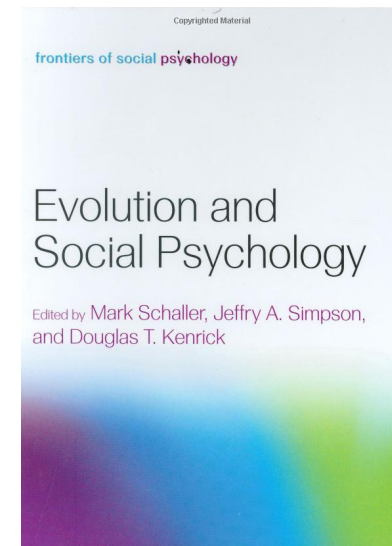
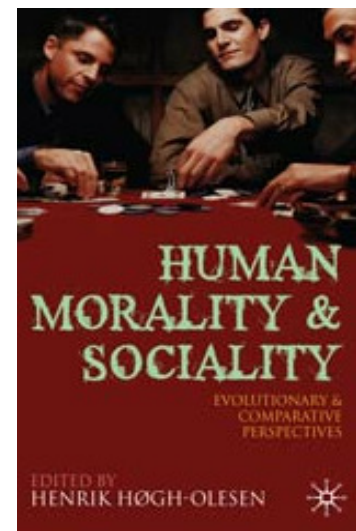
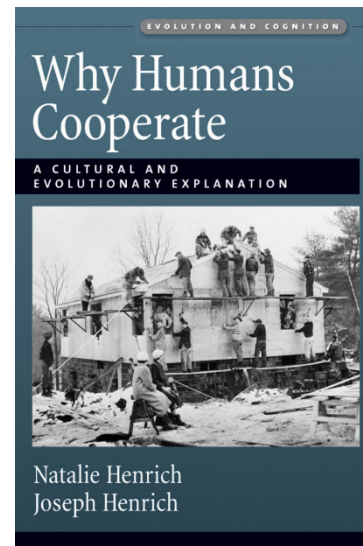
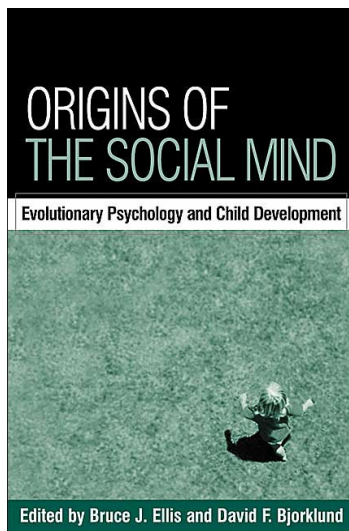
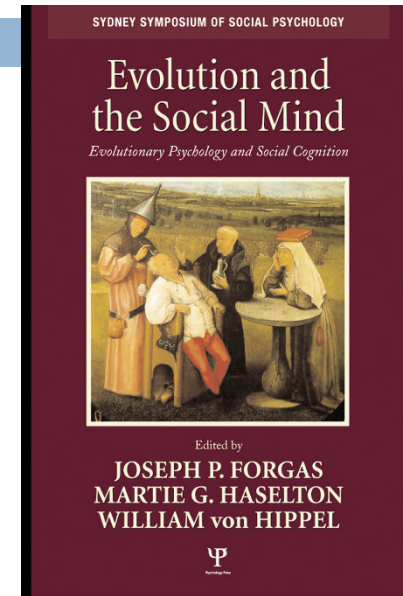
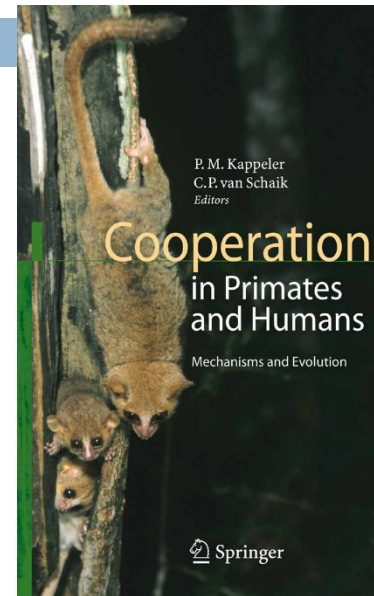
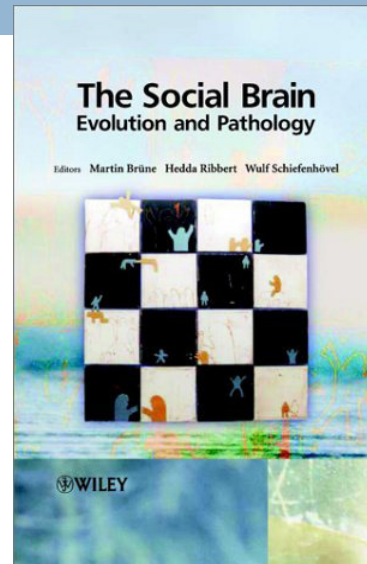
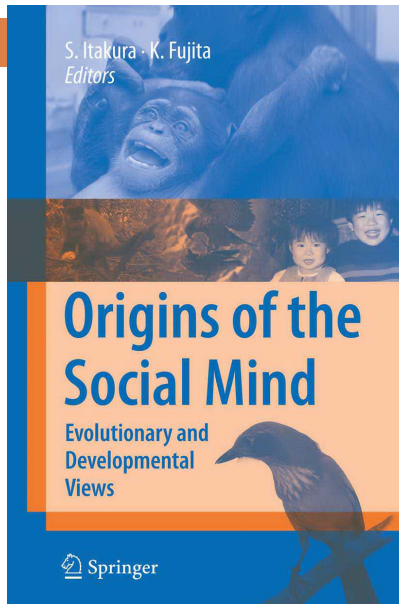


- Oxford University Press
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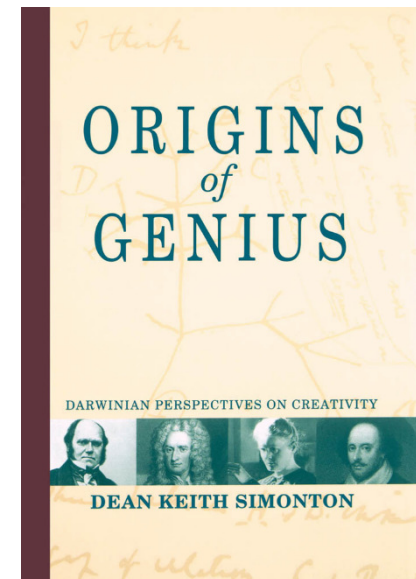
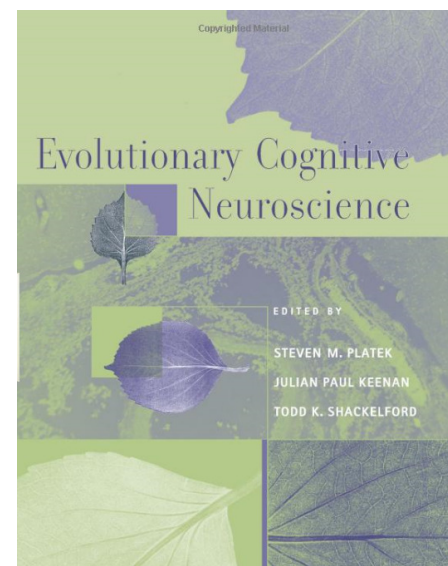
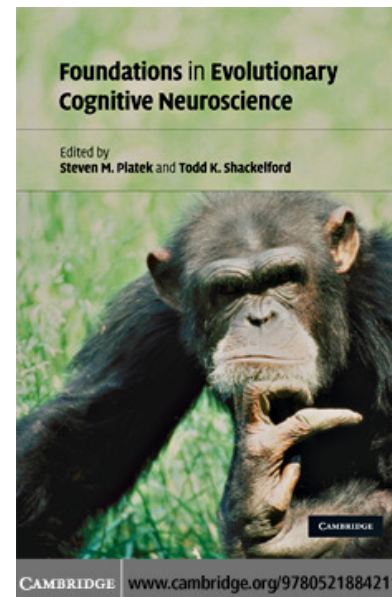
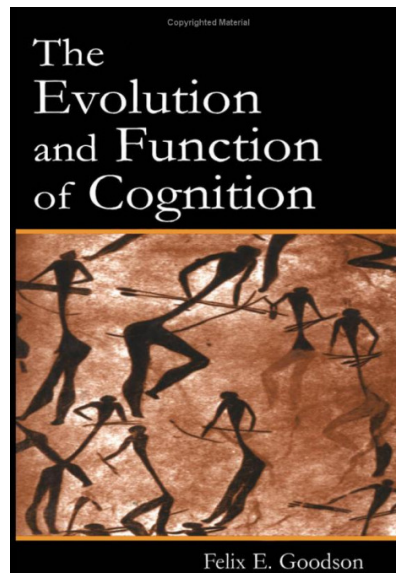
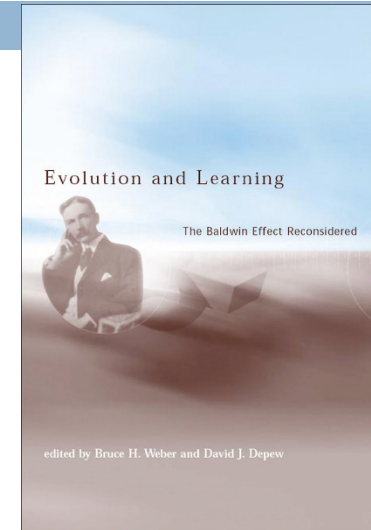
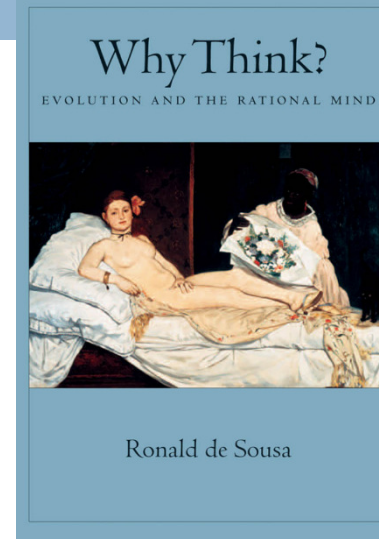
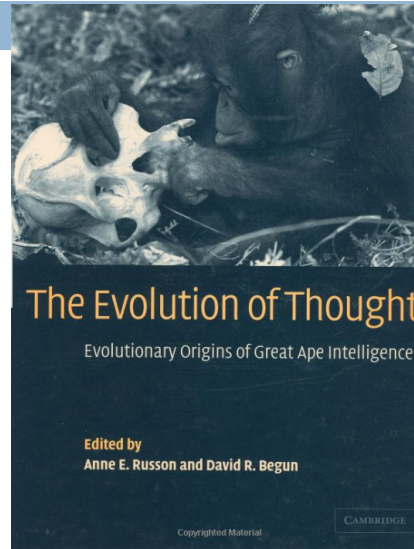
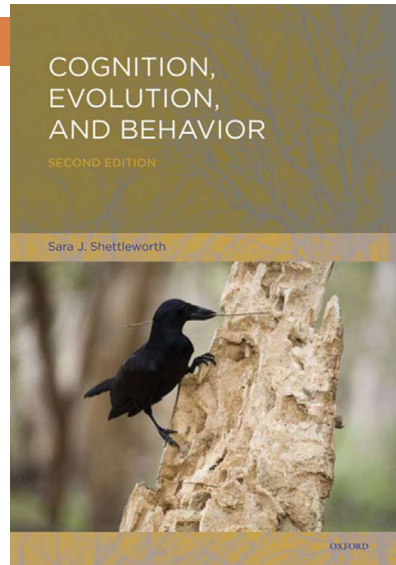
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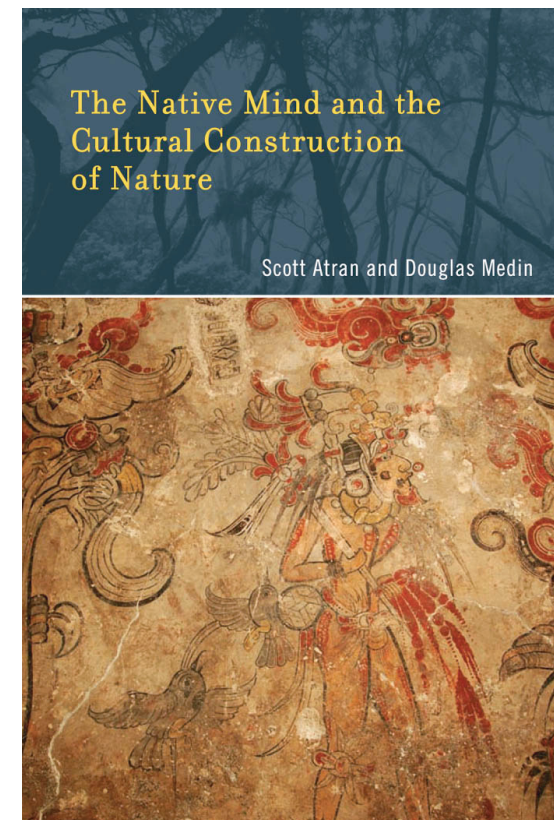
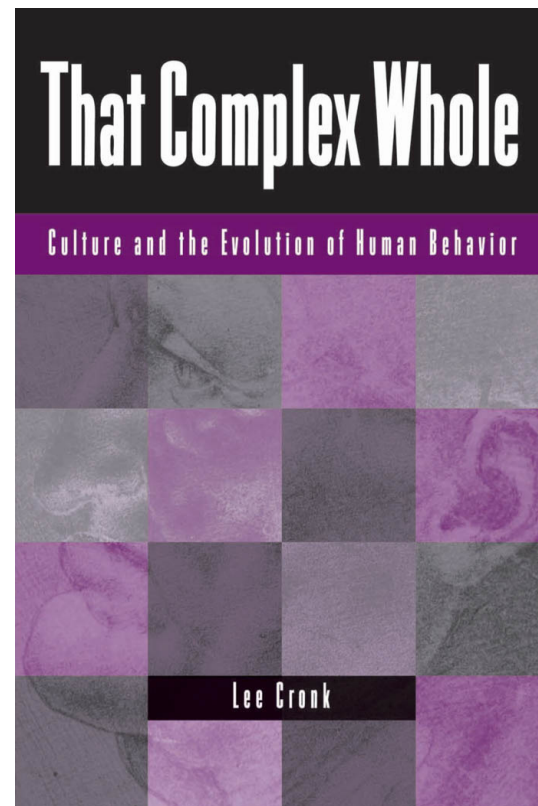
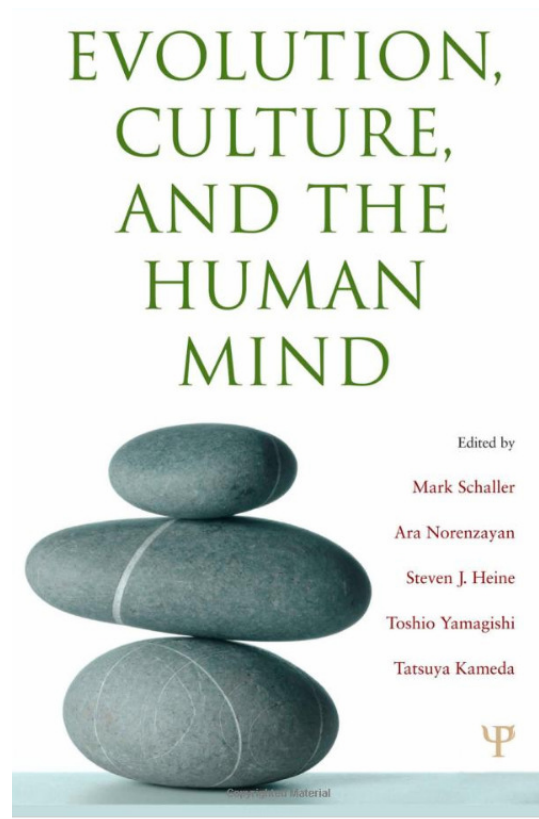
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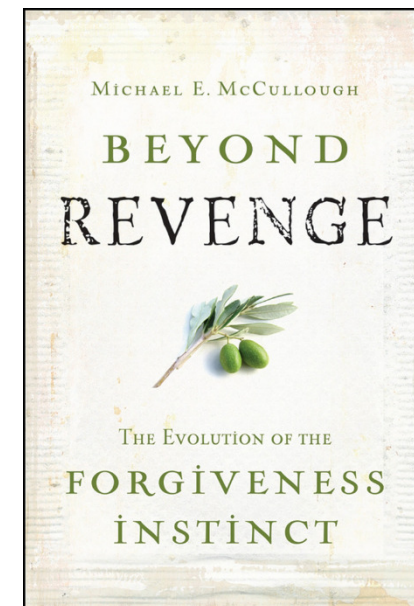
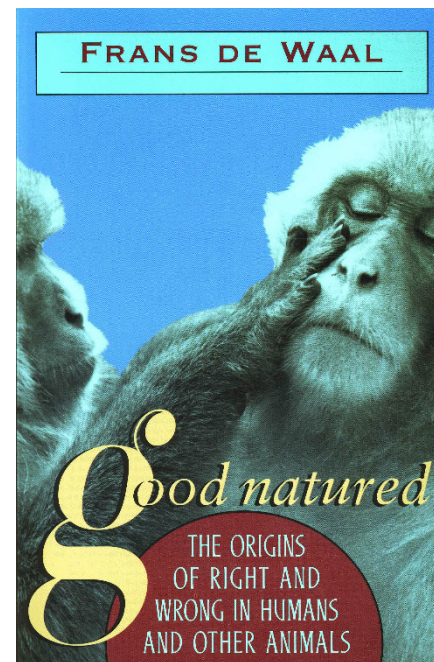
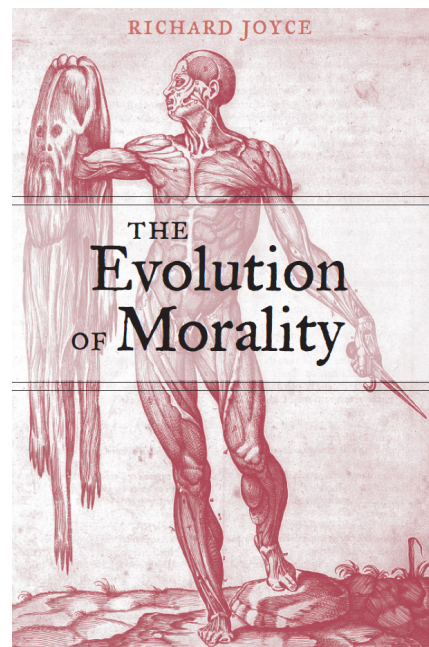
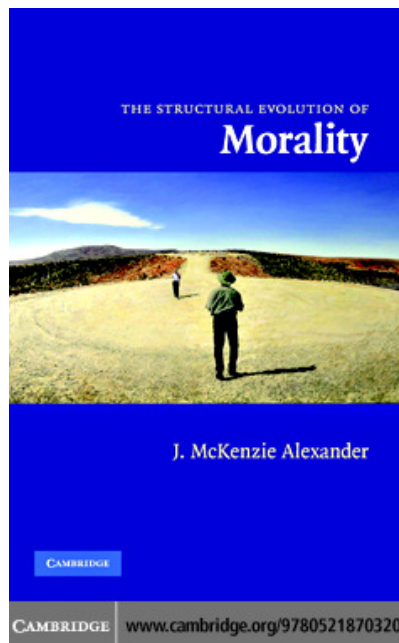
Umysł, poznanie



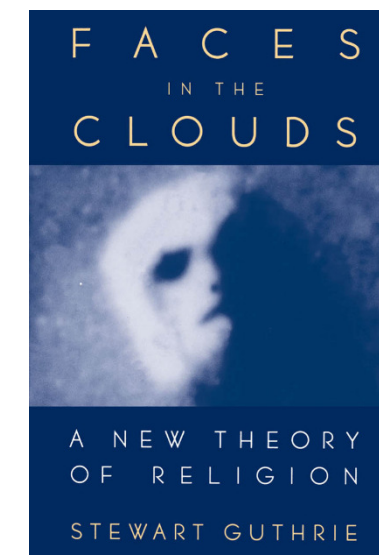
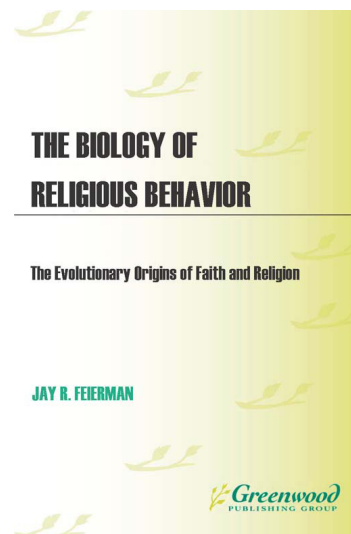
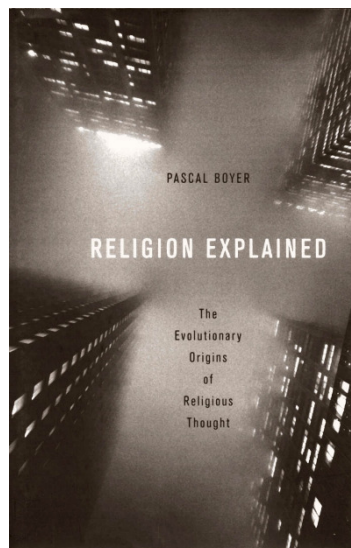
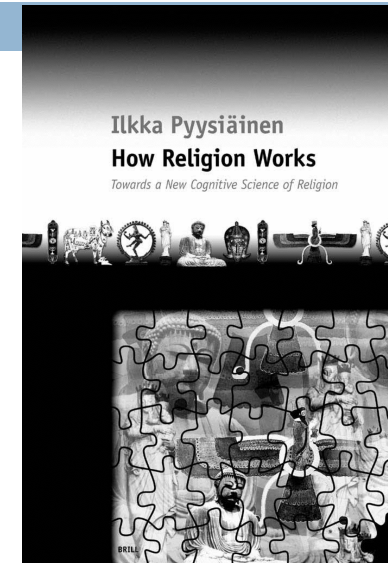
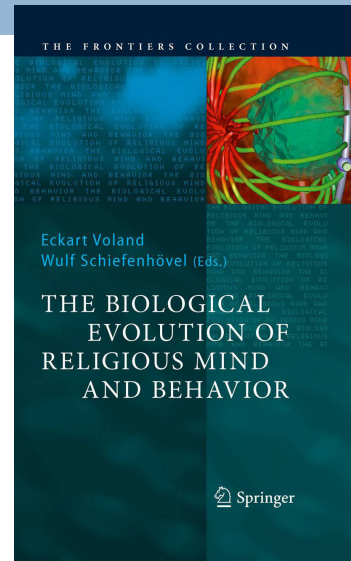
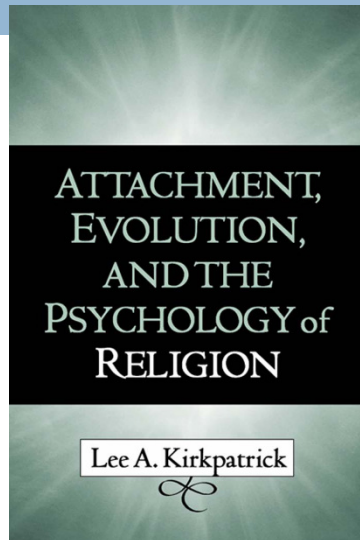
Kultura



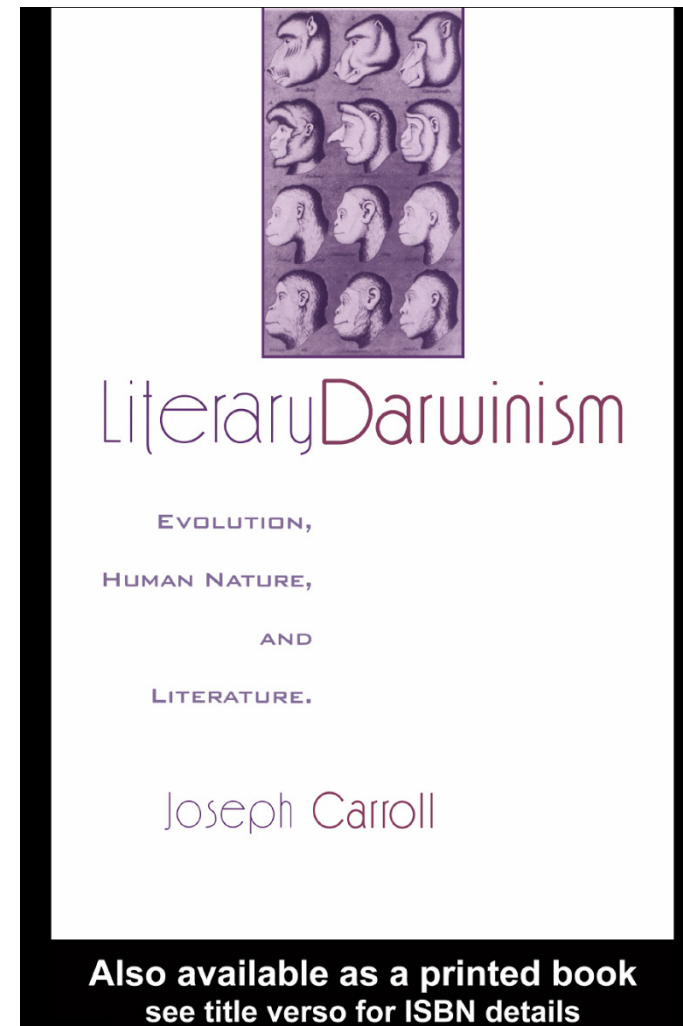
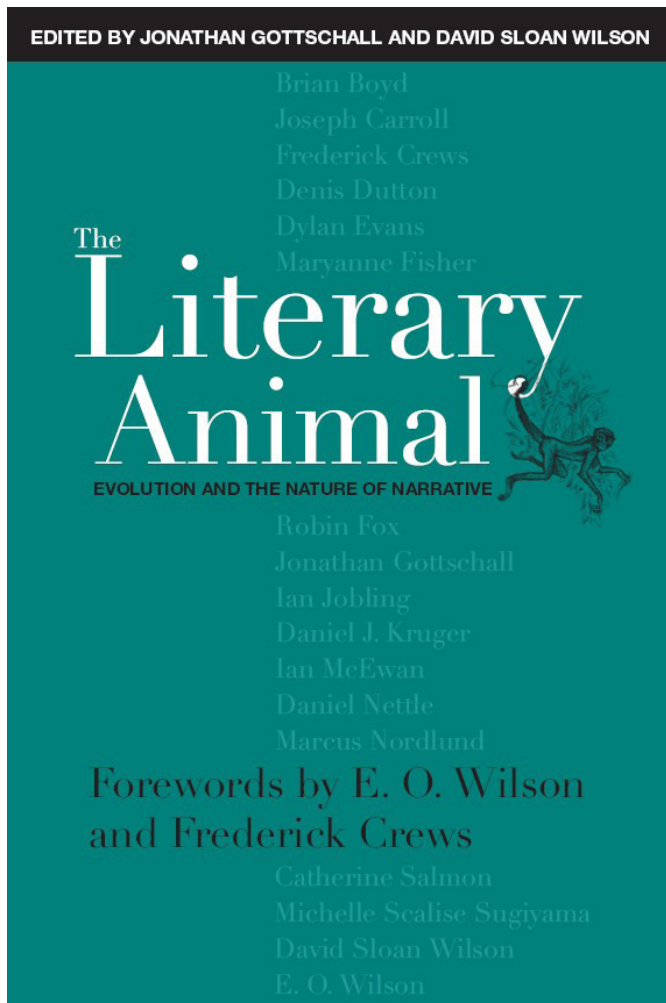
Moralność



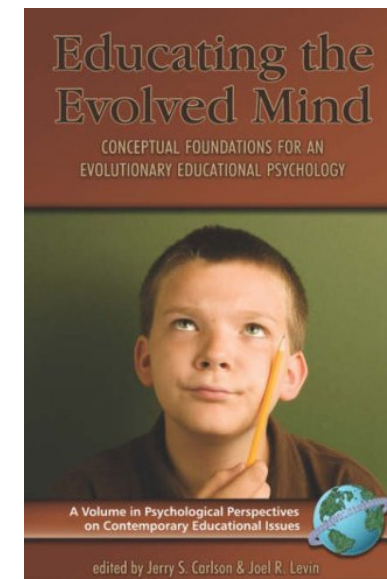
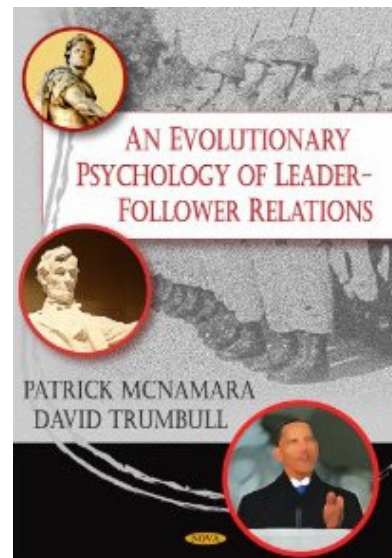
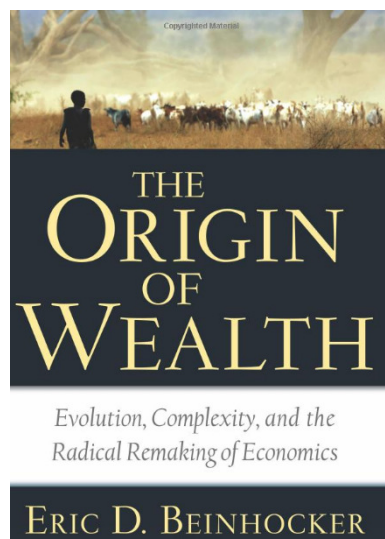
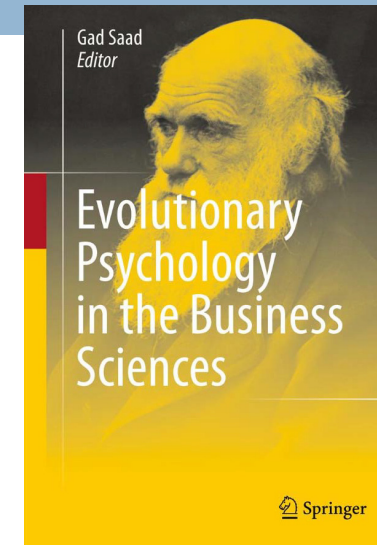
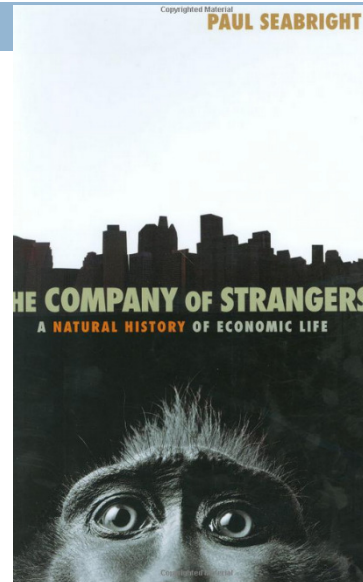
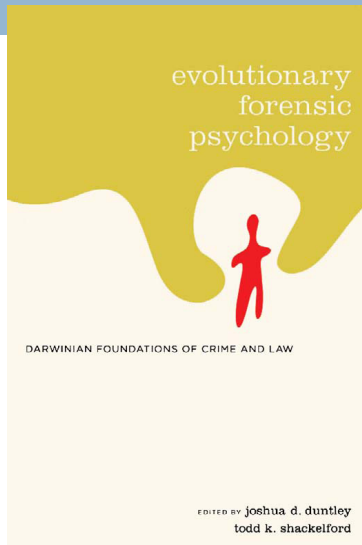
Religia



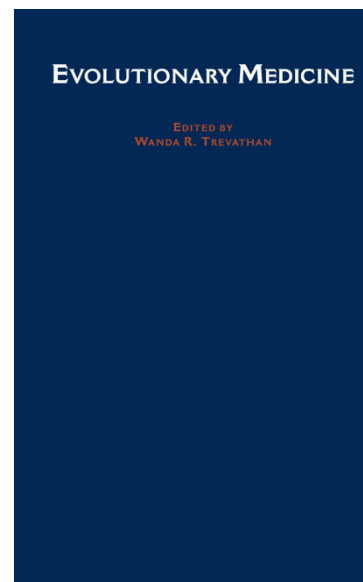
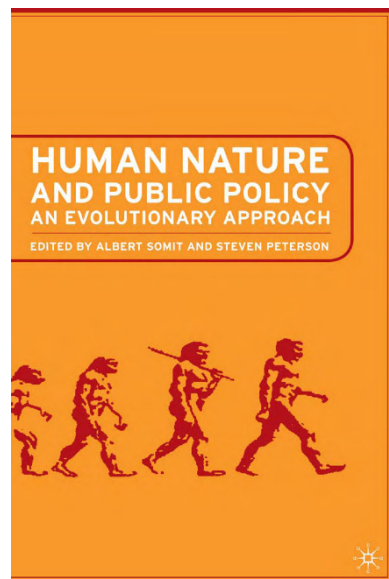
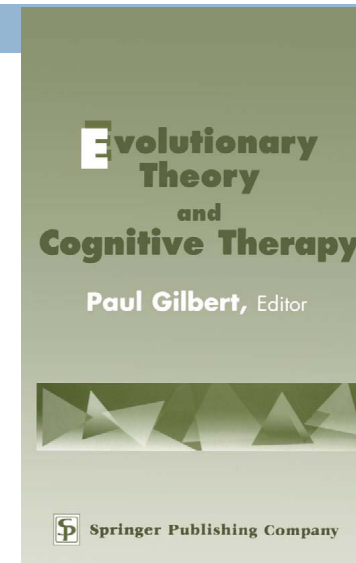
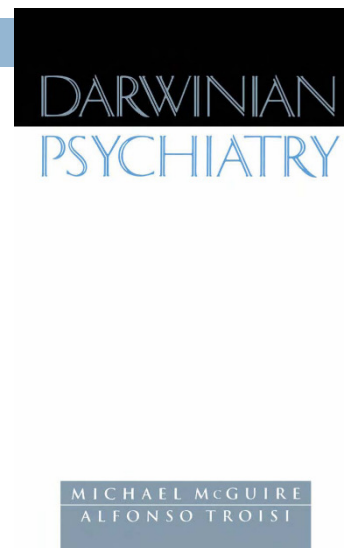
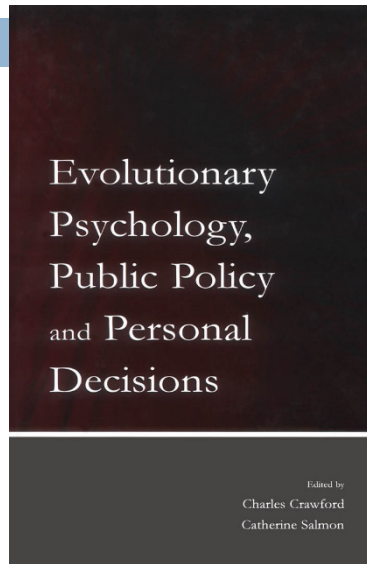
Literatura



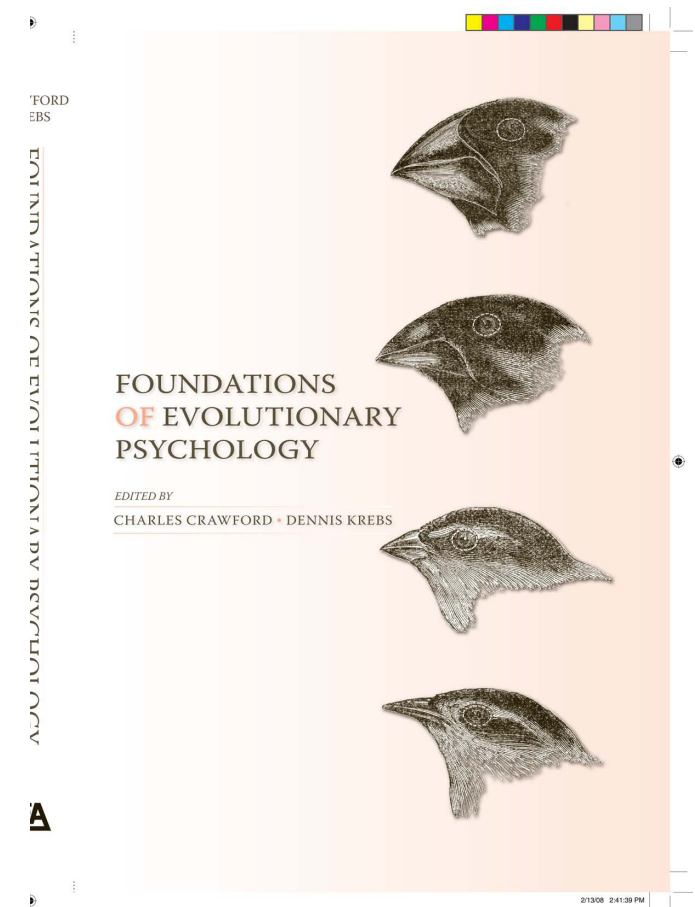
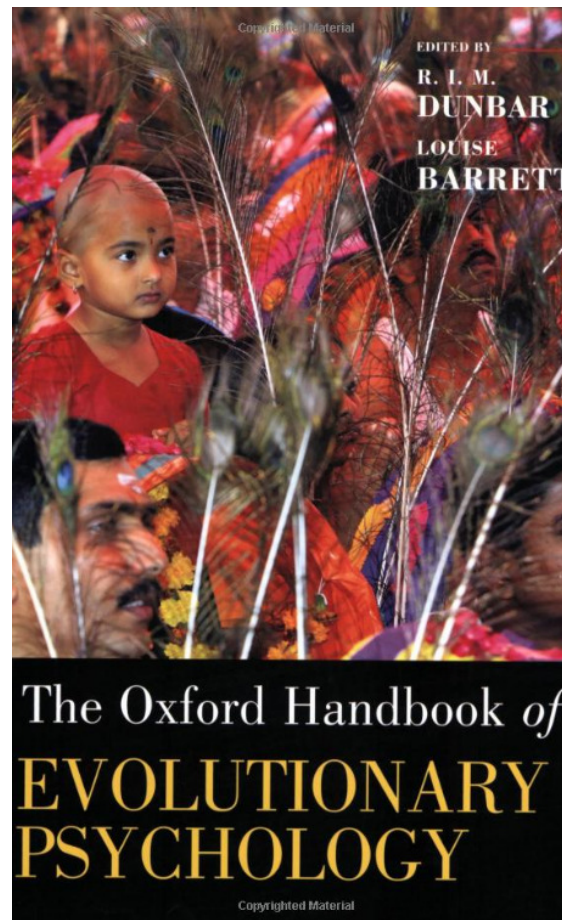
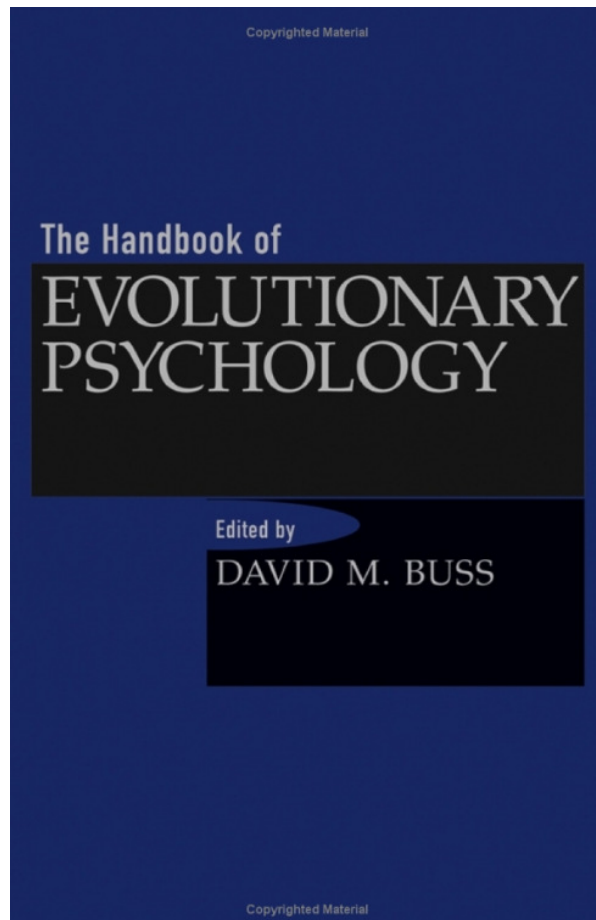
Stosowana



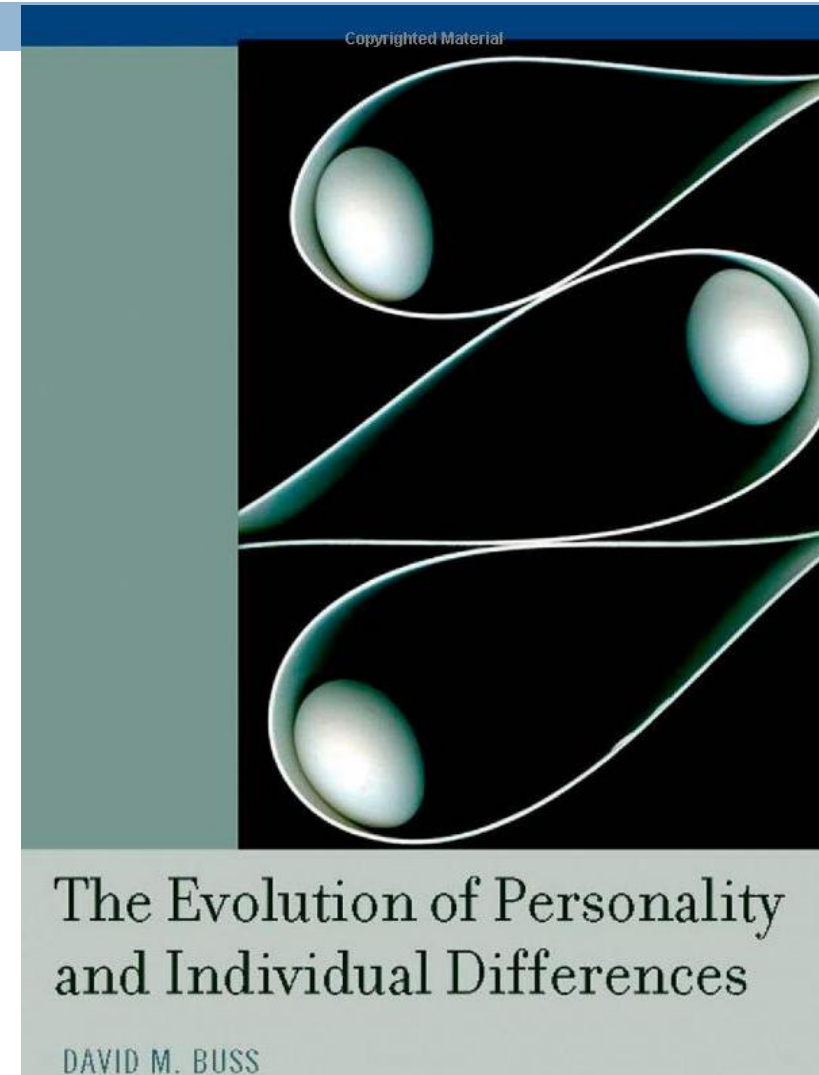
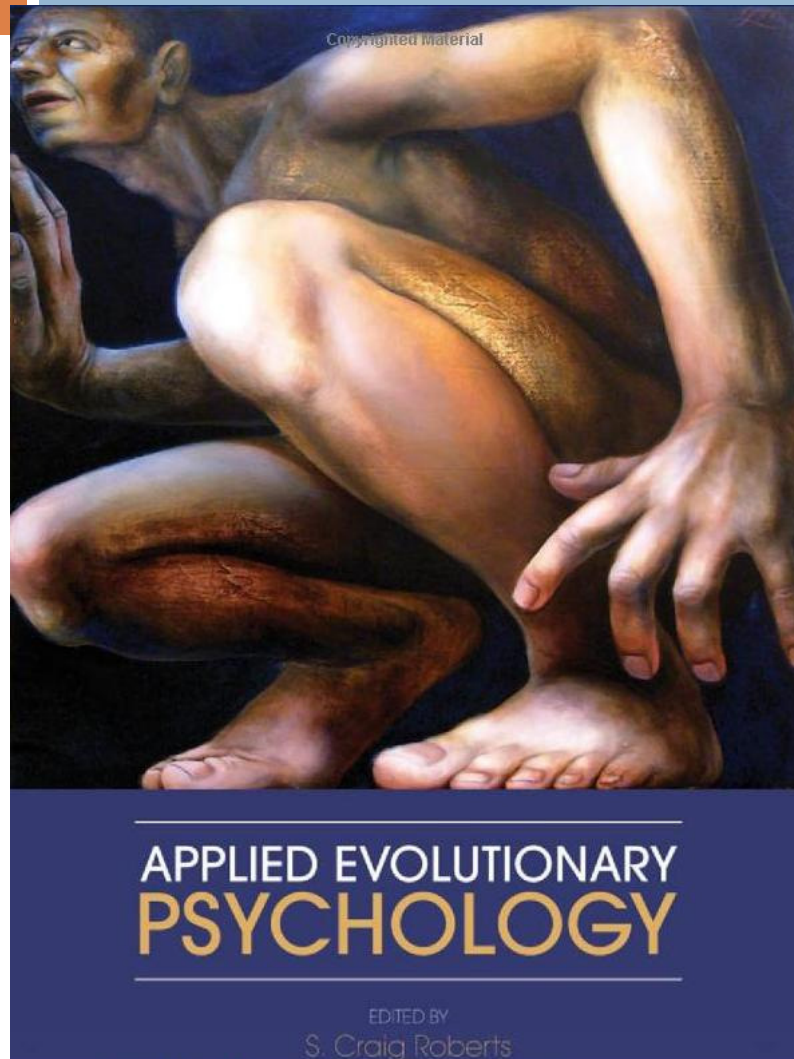
Stosowana



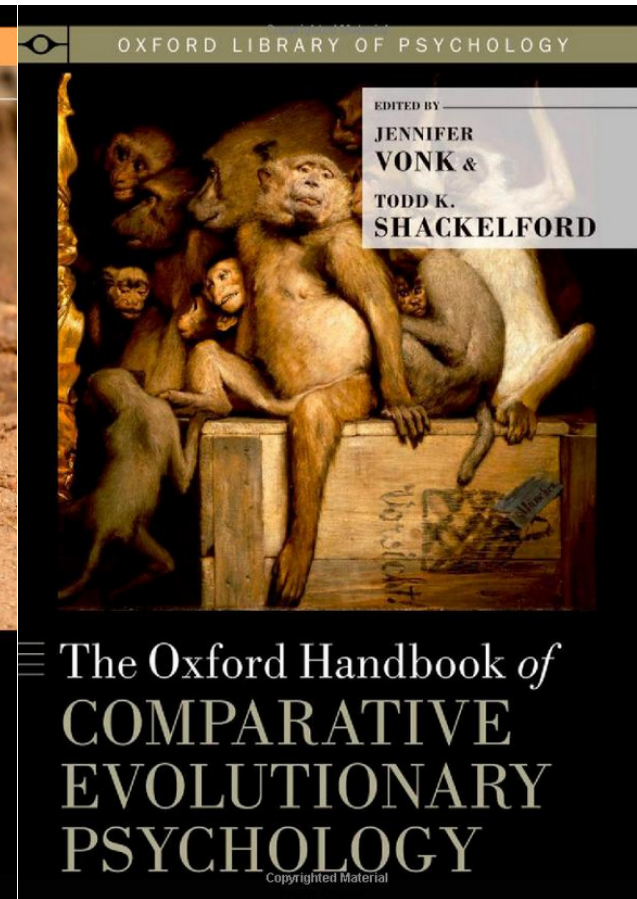
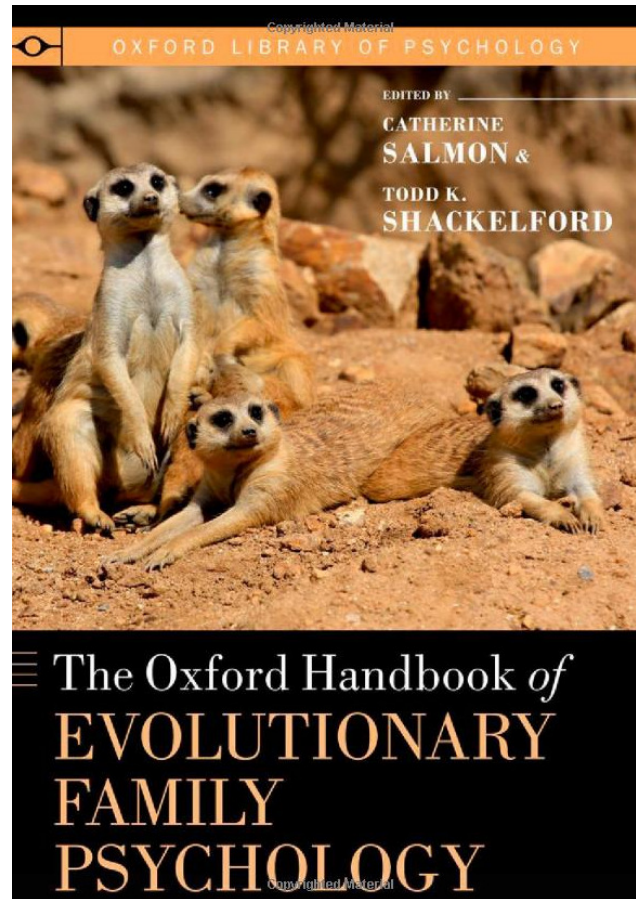
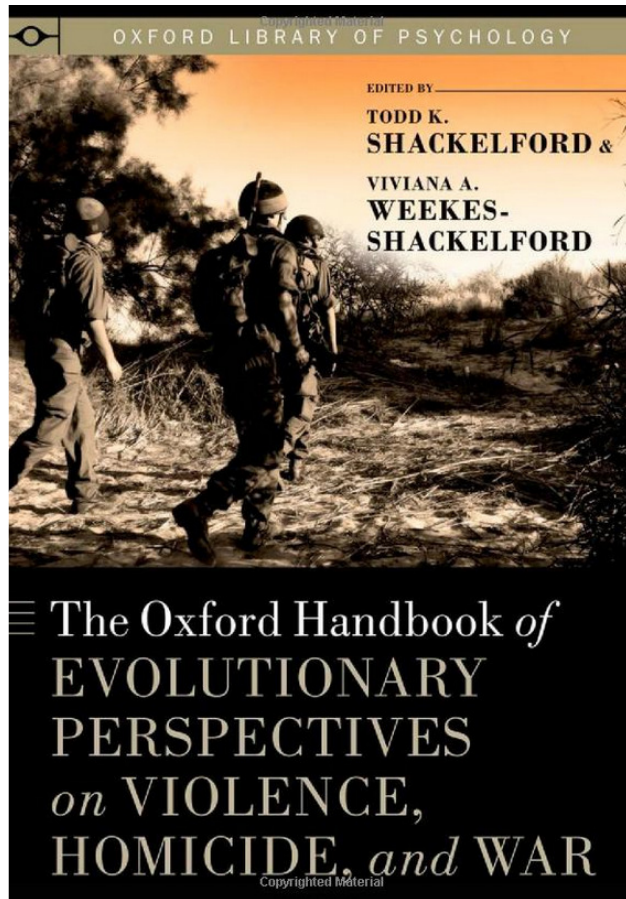
Ogólne monografie



Ogólne monografie




Seria „Oxford Handbooks”



Myślenie ewolucyjne w psychologii – co zacz?

- WSPÓLNY MIANOWNIK:
 - ▣ Historia naturalna ma znaczenie w analizowaniu współczesnych ludzkich zachowań i mechanizmów psychologicznych

- WAŻNE ZAŁOŻENIA, ALE NIEKONIECZNIE
PODZIELANE PRZEZ WSZYSTKICH
 - ▣ Człowiek nie jest dobrze dostosowany do współczesnego środowiska
 - ▣ Ludzki umysł ma architekturę modułarną
 - ▣ Większa wydajność tych procesów psychologicznych, które miały duże znaczenie adaptacyjne

- 
- Znaczenie teorii średniego poziomu
 - Teoria ewolucji historii życiowych
 - Teoria inwestycji rodzicielskich
 - Teoria „zarządzania błędami”



Przykłady ciekawych (i mniej znanych) zastosowań myślenia ewolucyjnego

C. Fincher, R. Thornhill, D. Murray, M. Schaller (2008). Pathogen prevalence predicts human cross-cultural variability in individualism/collectivism. *Proceedings of the Royal Society: Biological Sciences*, 2008, 275, s. 1279-1285

- Natężenie występowania patogenów było związane z wyższym kulturowym kolektywizmem (i mniejszym indywidualizmem).

Table 1. Correlations between two measures of pathogen prevalence, and four measures of individualism/collectivism. (* $p < 0.001$; the number of geopolitical regions in each analysis is indicated in parentheses following each correlation coefficient.)

	pathogen prevalence index	
	historical	contemporary
individualism (Hofstede)	-0.69* (68)	-0.59* (68)
individualism (Suh)	-0.71* (58)	-0.58* (58)
collectivism (Gelfand)	0.73* (52)	0.56* (57)
collectivism (Kashima)	0.63* (70)	0.44* (70)

Nasilenie stresu pasożytniczego a różnicowanie średniego natężenia cech osobowości



- Schaller M., Murray D. (2008). Pathogens, Personality, and Culture: Disease Prevalence Predicts Worldwide Variability in Sociosexuality, Extraversion, and Openness to Experience. *Journal of Personality and Social Psychology*, 95, 212-221

- Nasilenie stresu pasożytniczego było negatywnie skorelowane ze średnimi wartościami nasilenia ekstrawersji i otwartości na doświadczenie ($r = <-0,67; -0,25>$). Nie było takiego efektu dla sumienności, neurotyzmu i ugodowości.

Table 1

Correlation Coefficients Indicating the Extent to Which Regional Variation in Disease Prevalence Predicts Cross-Cultural Variation on Each of the Big Five Personality Traits

Trait	Samples from which region-level Big Five trait scores were estimated				
	McCrae, 2002 (N = 33)	McCrae et al., 2005 (N = 50)	Schmitt et al., 2007 (N = 56)	Two-sample composite (N = 38)	Three-sample composite (N = 23)
Extraversion	-.67 (.000)	-.50 (.001)	-.26 (.052)	-.51 (.001)	-.59 (.003)
Openness	-.45 (.008)	-.34 (.016)	-.24 (.079)	-.44 (.006)	-.59 (.003)
Conscientiousness	.44 (.011)	-.08 (.594)	.23 (.085)	.02 (.891)	.14 (.516)
Agreeableness	.20 (.257)	-.44 (.001)	.27 (.039)	-.18 (.270)	.14 (.534)
Neuroticism	.24 (.173)	.15 (.309)	.01 (.961)	.22 (.177)	.25 (.242)

Note. Within each sample, tabled coefficients indicate zero-order correlations with disease prevalence. Two-tailed *p* values are in parentheses following each correlation coefficient

Patogeny a cechy psychologiczne i kulturowe



- Corey L., F., & Randy, T. (2008). Assortative sociality, limited dispersal, infectious disease and the genesis of the global pattern of religion diversity. *Proceedings Of The Royal Society B: Biological Sciences*, 275(1651), 2587-2594.
- Fincher, C. L., Thornhill, R. (2012). Parasite-stress promotes in-group assortative sociality: The cases of strong family ties and heightened religiosity. *Behavioral & Brain Sciences*, 35(2), 61-79.
- Murray, D. R., Trudeau, R., Schaller, M. (2011). On the origins of cultural differences in conformity: Four tests of the pathogen prevalence hypothesis. *Personality And Social Psychology Bulletin*, 37(3), 318-329.
- Thornhill, R., Fincher, C. L. (2011). Parasite stress promotes homicide and child maltreatment. *Philosophical Transactions of the Royal Society B*, 366, 3466-3477.
- Thornhill, R., Fincher, C. L., & Aran, D. (2009). Parasites, democratization and the liberalization of values across contemporary countries. *Biological Reviews*, 84, 113-131.

Konsekwencje społeczne

- Betzig, L. (1992) Roman Polygyny. *Ethology and Sociobiology*, 13, 309-349.

Cywilizacja	Władca	Liczba kobiet	Jakie kobiety?
Babilonu	Hammurabi	1 000 niewolnic	?
Doliny Indusu	Udayama	Do 16 000	Młode kobiety wolne od chorób i menstruacji
Azteków	Montezuma	4000 konkubin	Młode i piękne kobiety
Inków	Atahuallpa	1 500 w każdym domu dziewczic	Dobrego pochodzenia, piękne, młode
Chińska	Fei-Ti	10 000	Bardzo młode kobiety, 5 dni po menstruacji
Egiptu	Akhenaten	317	Bardzo piękne

Mnóstwo innych artykułów Betzig obrazujących te same zasady w innych państwach i okresach historycznych na stronie <http://laurabetzig.org/papers.html>

Współczesna Korea Północna

- **Jasper Becker „North Korea: At home with the Kims”.** *Asia Times*. 11 Oct 2003

- Licząca ok. 2 tys. młodych kobiet „brygada przyjemności”
- 3 zespoły
 - ▣ „satisfaction team” (seks)
 - ▣ „hapiness team” (masaż)
 - ▣ „dancing and singing team” (taniec)

- Kobiety mieszkają do 25. roku życia w jednej z 32 willi dyktatora



Zerjal, et al. (2003). The Genetic Legacy of the Mongols. *The American Journal of Human Genetics*, 72 (3), 717–721

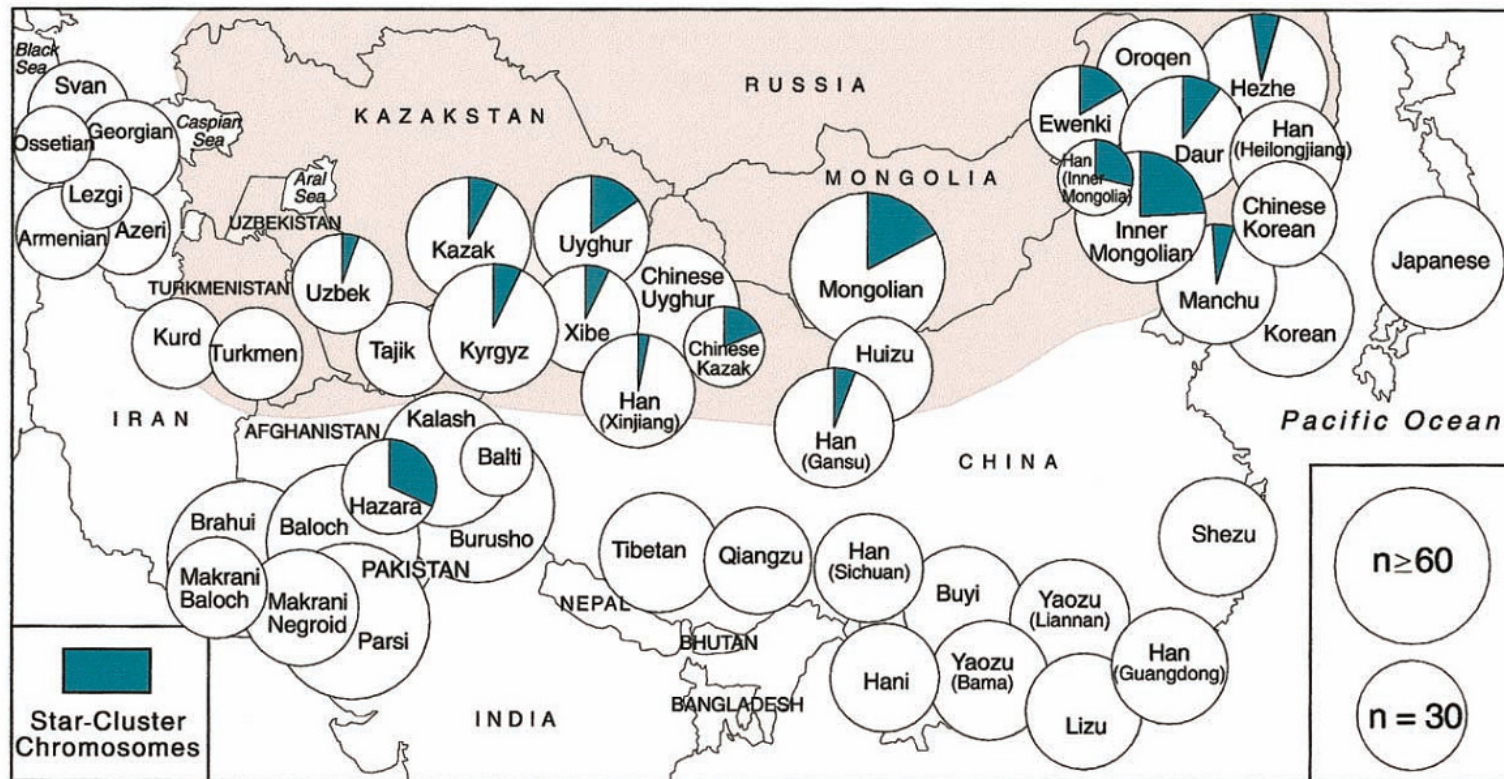


Figure 2 Geographical distribution of star-cluster chromosomes. Populations are shown as circles with an area proportional to sample size; star-cluster chromosomes are indicated by green sectors. The shaded area represents the extent of Genghis Khan's empire at the time of his death (Morgan 1986).



Płeć a operacje/zabiegi plastyczne

<http://www.surgery.org/sites/default/files/ASAPS-2012-Stats.pdf>

Procedure	Number of Procedures	Percent of Total	Rank within Category (Surgical/Nonsurgical)	Number of Procedures	Percent of Total	Category (Surgical/Nonsurgical)	
Surgical	Abdominoplasty (tummy tuck)	148,984	95.2%	3	7,524	4.8%	7
	Autologous fat grafting	66,986	93.2%	9	4,859	6.8%	8
	Blepharoplasty (cosmetic eyelid surgery)	129,920	84.8%	4	23,251	15.2%	3
	Breast augmentation	330,631	100.0%	1	0	0.0%	dna
	Breast lift	127,776	100.0%	5	0	0.0%	dna
	Breast reduction (women)*	112,795	100.0%	7	0	0.0%	dna
	Buttock augmentation	6,830	93.8%	17	455	6.3%	12
	Buttock lift	3,472	95.0%	19	183	5.0%	16
	Chin augmentation	8,204	76.4%	15	2,530	23.6%	9
	Facelift	107,608	90.4%	8	11,398	9.6%	6
	Forehead lift	22,397	91.7%	11	2,034	8.3%	10
	Gynecomastia, treatment of (male breast reduction)	0	dna	dna	22,736	100.0%	4
	Lip augmentation (other than injectable materials)	7,600	97.1%	16	225	2.9%	15
	Lipoplasty (liposuction)	271,369	86.7%	2	41,642	13.3%	1
	Lower body lift	9,306	92.0%	14	813	8.0%	11
	Otoplasty (cosmetic ear surgery)	18,305	60.3%	12	12,053	39.7%	5
	Rhinoplasty (nose reshaping)	113,836	79.2%	6	29,966	20.8%	2
	Thigh lift	16,113	97.6%	13	404	2.4%	13
	Upper arm lift	22,592	98.4%	10	377	1.6%	14
	Vaginal Rejuvenation	3,521	100.00%	18	0	0.0%	dna
Totals - Surgical Procedures	1,528,243	90.5%		160,451	9.5%		
Nonsurgical	Injectables:						
	Botulinum Toxin Type A (Botox, Dysport)	2,915,865	89.5%	1	342,048	10.5%	1
	Calcium hydroxylapatite (Radiesse)	118,515	91.4%	10	11,160	8.6%	12
	Hyaluronic Acid (including Juvederm, Perlane/Restylane, Belotero, Prevelle, Elevee)	1,318,197	92.6%	2	105,508	7.4%	3
	Poly-L-Lactic Acid (Sculptra)	61,099	87.3%	14	8,867	12.7%	14
	Totals - Injectables	4,413,675	90.4%		467,583	9.6%	
	Skin Rejuvenation:						
	Chemical Peel	418,774	94.4%	5	25,050	5.6%	7
	Dermabrasion	20,472	88.1%	16	2,776	11.9%	16
	Fractional Resurfacing	75,349	87.3%	12	10,964	12.7%	13
	IPL Laser Treatment	308,764	91.5%	7	28,718	8.5%	6
	Laser Skin Resurfacing	401,915	92.9%	6	30,581	7.1%	5
	Microdermabrasion	454,069	91.0%	4	44,751	9.0%	4
	Noninvasive Tightening (incl. Ulthera, Thermage, Pelleve)	266,182	93.8%	9	17,559	6.2%	9
	Totals - Skin Rejuvenation	1,945,526	92.4%		160,400	7.6%	
	Other:						
	Laser Hair Removal	757,489	85.7%	3	126,404	14.3%	2
	Laser Treatment of Leg Veins	107,997	95.7%	11	4,855	4.3%	15
	Non-Invasive Body Sculpting (incl. CoolSculpting, Vaser Shape, Liposonix)	62,014	80.9%	13	14,598	19.1%	10
	Sclerotherapy	283,229	95.2%	8	14,272	4.8%	11
Tattoo Laser Treatment	38,529	65.9%	15	19,900	34.1%	8	
Totals - Other Nonsurgical Procedures	1,249,258	87.4%		180,028	12.6%		
Totals - Nonsurgical Procedures	7,608,459	90.4%		808,011	9.6%		
TOTALS ALL PROCEDURES	9,136,702	90.4%		968,462	9.6%		

Za: Ellis, B. J., Jackson, J. J., & Boyce, W. T. (2006). The stress response systems: Universality and adaptive individual differences. *Developmental Review*, 26(2), 175–212.

- W badaniach (eksperymentalnych) na gryzoniach stresory środowiskowe (np.. obecność drapieżników) powodowały całą kaskadę zmian fizjologicznych i behawioralnych w tym m.in.. wcześniejsze dojrzewanie płciowe, większą receptywność seksualną oraz zmniejszenie opieki nad potomstwem.

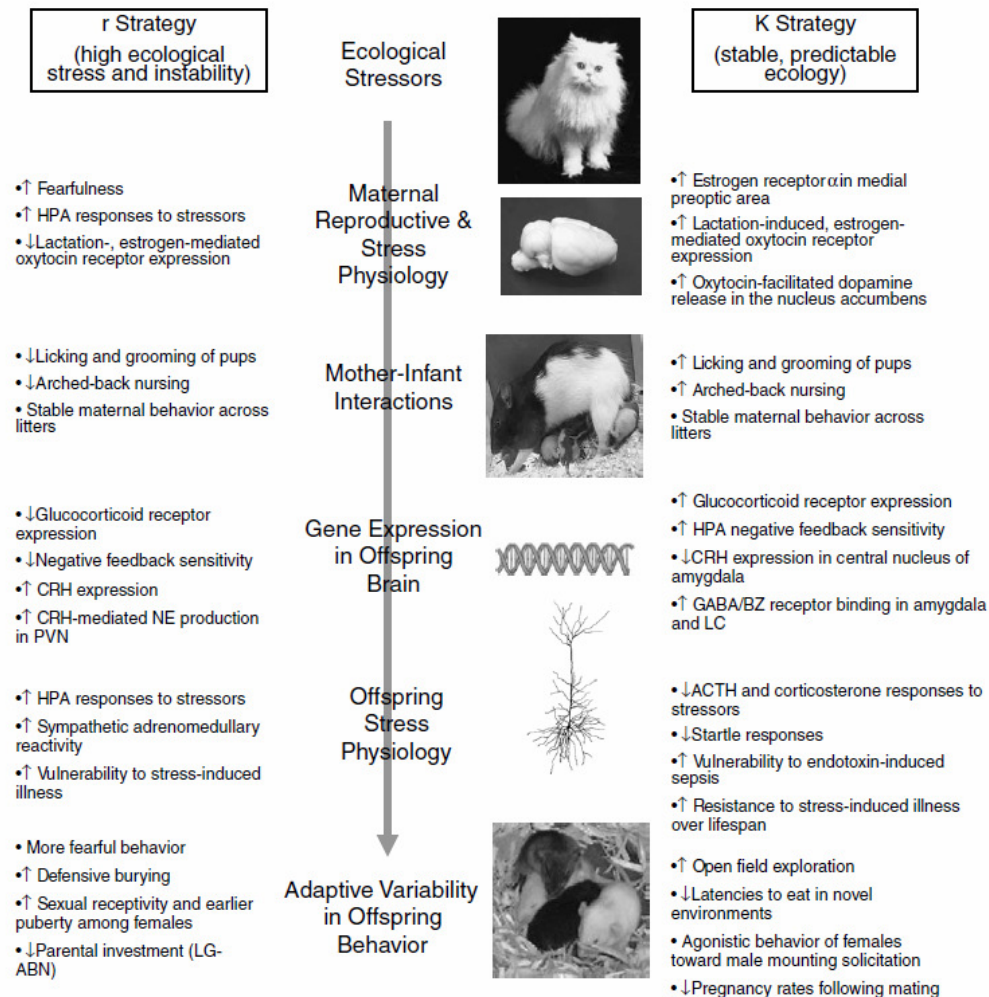


Fig. 4. A theory of adaptive phenotypic plasticity in the stress response systems and developmentally linked defensive and reproductive strategies in rodents. HPA, hypothalamic-pituitary-adrenocortical; CRH, corticotrophin releasing hormone; NE, norepinephrine; PVN, paraventricular nucleus; LG-ABN, licking and grooming-arched back nursing; GABA/BZ, γ -aminobutyric acid/benzodiazepine; LC, locus coeruleus; ACTH, corticotrophin.

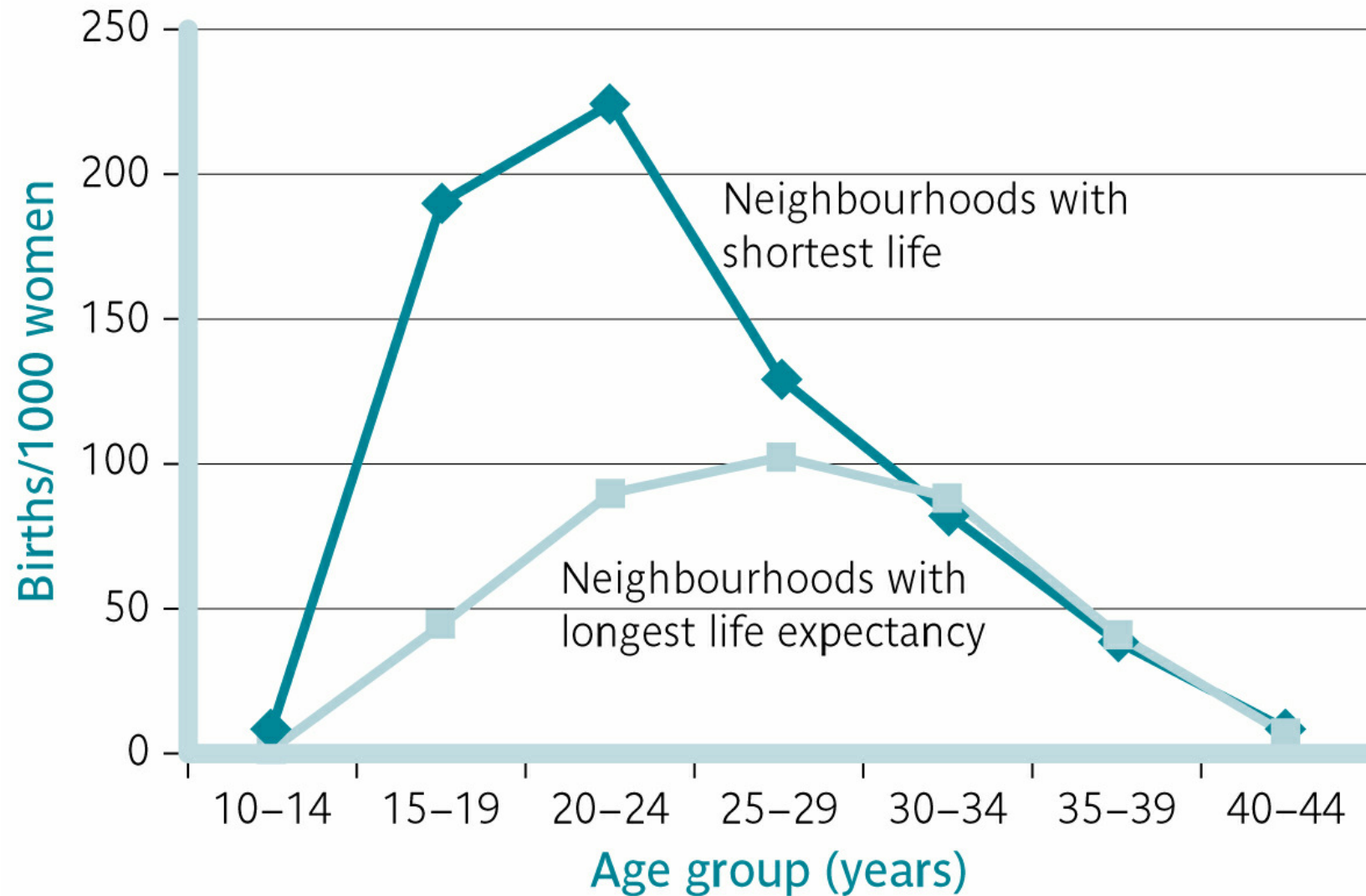
Wilson, M., Daly, M. (1997) Life expectancy, economic inequality, homicide, and reproductive timing in Chicago suburbs. *British Medical Journal*, 314, 70-89.

- W bardziej zagrożających dzielnicach kobiety wcześniej rozpoczynały reprodukcję

Table 3 Age specific birth rates (per 1000 women per year) in 10 neighbourhoods with longest life expectancy, 10 with shortest life expectancy, and 10 nearest median life expectancy in Chicago, 1988-93

Age of mother (years)	Birth rate in neighbourhoods		
	Shortest life expectancy	Median life expectancy	Longest life expectancy
10-14	9	2	1
15-19	190	86	45
20-24	224	128	90
25-29	129	103	103
30-34	83	84	89
35-39	39	43	42
40-44	9	10	7

Wilson, M., Daly, M. (1997) Life expectancy, economic inequality, homicide, and reproductive timing in Chicago suburbs. *British Medical Journal*, 314, 70-89.



Chisholm, J. S., Quinlivan, J. A., Petersen, R. W. & Coall, D. A. (2005) Early stress predicts age at menarche and first birth, adult attachment, and expected lifespan. *Human Nature*, 16, 233–265.

- Kobiety, u których występowały wczesnodziecięce stresory, wcześniej miały pierwszą miesiączkę i wcześniej rodziły pierwsze dziecko. Miały też rzadziej bezpieczny styl przywiązania

Table 6. Early Stress and Reproductive Strategies/Mechanisms

<i>Early Stressors</i>	<i>Reproductive Strategies/Mechanisms</i>								
	<i>Mean Age at Menarche</i>			<i>Mean Age at First Birth</i>			<i>Adult Attachment (% Secure)</i>		
	Early Stress	No Early Stress	<i>p</i> [†]	Early Stress	No Early Stress	<i>p</i> [†]	Early Stress	No Early Stress	<i>p</i> [‡]
M-F violence	11.8	12.9	.026	18.1	23.6	.001	27.3	82.1	<.001
F absent/no F figure/ divorce/separation	12.1	13.1	<.001	19.5	25.1	.001	51.2	86.5	<.001
M absent/no M figure	12.3	12.7	ns	19.8	22.7	.08	69.2	70.6	ns
relations with M	12.1	13.0	.018	20.3	23.9	.004	55.5	77.6	.045
M personality	11.9	13.0	.001	19.5	24.1	<.001	53.6	75.9	.048
relations with F	12.5	13.0	ns	20.9	25.0	.001	64.9	85.0	.063
F personality	12.3	13.0	.034	20.2	24.9	<.001	55.2	89.4	.002
M-F relations	12.2	13.0	.039	19.9	24.7	<.001	58.7	86.8	.006

Ellis, B., McFadyen-Ketchum, S. et al.. (1999) Quality of Early Family Relationships and Individual Differences in the Timing of Pubertal Maturation in Girls: A Longitudinal Test of an Evolutionary Model. *Journal of Personality and Social Psychology*, 77, 387-401

- W badaniach podłużnych dziewczynki mające większą ilość stresorów (np.. negatywne relacje z ojcem i matką, brak biologicznego ojca wcześniej dojrzewały płciowo)

Table 3

Prekindergarten Measures of Contextual Family Stressors and Quality of Family Relationships Correlated With Seventh-Grade Pubertal Timing

Prekindergarten measure	n (pairwise)	Pubertal timing
Contextual family stressors		
Socioeconomic status	170	.01
Father absence ^a	149	.17*
Single-parent status ^b	163	.17*
Family life stressors	173	.02
Quality of family relationships		
Harshness of discipline	173	.04
Severity of conflict in parental dyad	161	-.11
Supportiveness in parental dyad	162	-.25***
Time spent by father in child care	173	-.23**
Mother–daughter affectionate-positivity	59	-.29*
Father–daughter affectionate-positivity	41	-.43**
Mother–daughter coercive control	59	.23
Father–daughter coercive control	40	-.22

Note. All significance tests are two-tailed.

^a Intact biological families versus single mothers. ^b Two-parent families versus single mothers.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Chasiotis, A., Scheffer, D., Restmeier, R., & Keller, H. (1998). Intergenerational context discontinuity affects the onset of puberty: A comparison of parent-child dyads in West and East Germany. *Human Nature*, 9, 321–339.

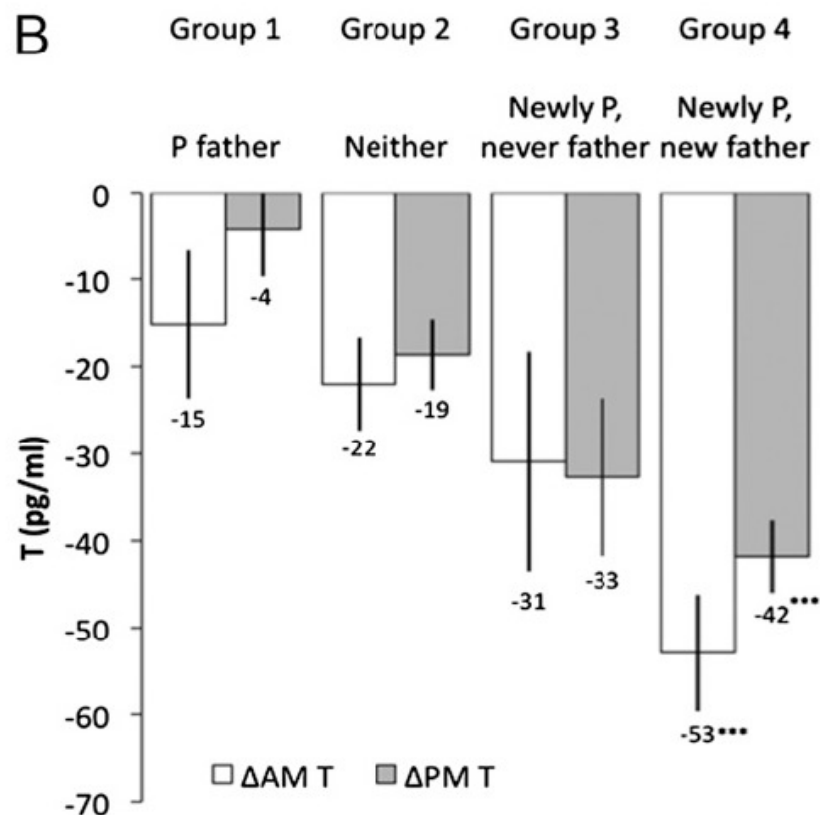
- Stresory środowiskowe a czas pierwszej miesiączki
- SES = status ekonomiczno-społeczny
- Zachodnie Niemcy:
 - ▣ SES matek i córek: $r=0,51$
 - ▣ Czas pierwszej miesiączki matek i córek: $r=0,6$
- Wschodnie Niemcy:
 - ▣ SES matek i córek: $r=-0,04$
 - ▣ Czas pierwszej miesiączki matek i córek: $r=-0,07$

Środowiskowe uwarunkowania dojrzewania płciowego i strategii seksualnych u kobiet

- Belsky, J., Steinberg, L. D., Houts, R. M., Friedman, S. L., DeHart, G., Cauffman, E., Roisman, G. I., et al. (2007). Family rearing antecedents of pubertal timing. *Child Development, 78*(4), 1302–1321.
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- Zostanie ojcem zmniejsza ilość testosteronu u mężczyzn. Jest to najprawdopodobniej przykład przetargu pomiędzy zachowaniami nastawionymi na pozyskiwanie partnerów seksualnych (szczególnie poprzez rywalizację i agresję) oraz zachowaniami rodzicielskimi.



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- Im ojciec więcej czasu poświęcał na opiekę nad potomstwem tym miał niższy poziom testosteronu

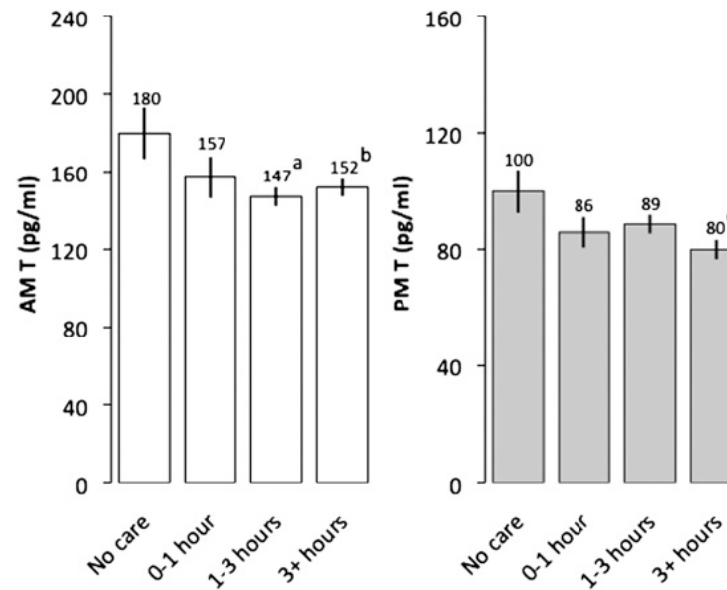


Fig. 3. 2009 AM and PM T values among fathers varying in daily physical childcare. Values were derived from regressing T on daily paternal caregiving, controlling for time of saliva collection, usual wake time (AM), sleep quality, psychosocial stress, and number of children, with fathers who reported no involvement in childcare as the comparison group. No care ($n = 34$), 0–1 h ($n = 37$), 1–3 h ($n = 139$), 3+ h ($n = 102$). Regression models were calculated with robust SEs. ^a $P = 0.020$; ^b $P = 0.044$; ^c $P = 0.015$. AM model: $R^2 = 0.047$; PM model: $R^2 = 0.046$. Error bars indicate SEM.



Czy myślenie ewolucyjne jest
meta-teorią?



- NIE!

- Dlaczego?

- ▣ Nie generuje bezpośrednio w miarę pewnych przewidywań

- Niedoskonała znajomość środowiska, w którym ewoluowali ludzie

- Brak ścisłych teorii jak struktura neuronalna wpływa na zachowanie i jak geny wpływają na strukturę neuronalną.

Pełna psychologia

