**University of Texas at Arlington School of Social Work**

**Course Syllabus**

**Brain and Behavior**

**SOCW 6389-002**

**Fall 2014**

**Instructor:** Bruce L. Bower, M.S.W., L.C.S.W., Assistant Professor in Practice

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**Office Hours:** Tuesdays from 1400h. to 1700h., and Wednesdays from 0900h. to 1200h.

**Course Number:** SOCW 6389, Section 002 **Course ID:** 88922; **Title:** Social Work Brain and Behavior.

**Time and Place:** Fridays from 1600h. to 1850h., August 22th to November 21th; Social Work Complex, Building A, Room 115.

**CSWE EPAS Content:** Practice and Human Behavior and the Social Environment

Professional practice involves the dynamic and interactive processes of engagement, assessment, intervention, and evaluation at multiple levels. Social workers have the knowledge and skills to practice with individuals, families, groups, organizations, and communities. Practice knowledge includes identifying, analyzing, and implementing evidence-based interventions designed to achieve client goals; using research and technological advances; evaluating program outcomes and practice effectiveness; developing, analyzing, advocating, and providing leadership for policies and services; and promoting social and economic justice. Social work education programs provide content on the reciprocal relationships between human behavior and social environments. Content includes empirically based theories and knowledge that focus on the interactions between and among individuals, groups, societies, and economic systems to guide practice. It includes theories and knowledge of biological, sociological, cultural, psychological, and spiritual development across the life span; the range of social systems in which people live (individual, family, group, organizational, and community); and the ways social systems promote or deter people in maintaining or achieving health and well-being.

EPAS core competencies and practice behaviors addressed in this course are:

**Educational Policy 2.1.1**—**Identify as a professional social worker and conduct oneself accordingly.**

Social workers serve as representatives of the profession, its mission, and its core values. They know the profession’s history. Social workers commit themselves to the profession’s enhancement and to their own professional conduct and growth. Social workers

• advocate for client access to the services of social work;

• practice personal reflection and self-correction to assure continual professional development;

• attend to professional roles and boundaries;

• demonstrate professional demeanor in behavior, appearance, and communication;

• engage in career-long learning; and

• use supervision and consultation.

**Educational Policy 2.1.2**—**Apply social work ethical principles to guide professional practice.**

Social workers have an obligation to conduct themselves ethically and to engage in ethical decision-making. Social workers are knowledgeable about the value base of the profession, its ethical standards, and relevant law. Social workers

• recognize and manage personal values in a way that allows professional values to guide practice;

• make ethical decisions by applying standards of the National Association of Social Workers Code of Ethics2 and, as applicable, of the International Federation of Social Workers/International Association of Schools of Social Work Ethics in Social Work, Statement of Principles;3

• tolerate ambiguity in resolving ethical conflicts; and

• apply strategies of ethical reasoning to arrive at principled decisions.

1. Advanced practitioners in DPMH will describe an effective decision-making strategy for deciphering ethical dilemmas in mental health treatment.

**Educational Policy 2.1.3**—**Apply critical thinking to inform and communicate professional judgments.**

Social workers are knowledgeable about the principles of logic, scientific inquiry, and reasoned discernment. They use critical thinking augmented by creativity and curiosity. Critical thinking also requires the synthesis and communication of relevant information. Social workers

• distinguish, appraise, and integrate multiple sources of knowledge, including research-based knowledge, and practice wisdom;

• analyze models of assessment, prevention, intervention, and evaluation; and

• demonstrate effective oral and written communication in working with individuals, families, groups, organizations, communities, and colleagues.

1. Advanced practitioners in DPMH will use critical thinking to adapt established assessment and treatment approaches to the unique characteristics

**Educational Policy 2.1.4**—**Engage diversity and difference in practice.**

Social workers understand how diversity characterizes and shapes the human experience and is critical to the formation of identity. The dimensions of diversity are understood as the intersectionality of multiple factors including age, class, color, culture, disability, ethnicity, gender, gender identity and expression, immigration status, political ideology, race, religion, sex, and sexual orientation. Social workers appreciate that, as a consequence of difference, a person’s life experiences may include oppression, poverty, marginalization, and alienation as well as privilege, power, and acclaim. Social workers

• recognize the extent to which a culture’s structures and values may oppress, marginalize, alienate, or create or enhance privilege and power;

• gain sufficient self-awareness to eliminate the influence of personal biases and values in working with diverse groups;

• recognize and communicate their understanding of the importance of difference in shaping life experiences; and

• view themselves as learners and engage those with whom they work as informants.

1. Advanced practitioners in DPMH understand the knowledge base and skills in how to intervene with the culture-bound syndromes defined in the Diagnostic and Statistical Manual.
2. Advanced practitioners in DPMH understand and can apply the relevant cultural, class, gender, race, age, disability, and other diversity issues that influence the prognosis and treatment of persons with severe and persistent mental illness and substance use disorders, persons with other mental health issues, and persons with psychiatric disabilities, and their families and communities. They can relate social work perspectives, the evidence base, and related theories to practice with these groups.

**Educational Policy 2.1.6**—**Engage in research-informed practice and practice-informed research.**

Social workers use practice experience to inform research, employ evidence-based interventions, evaluate their own practice, and use research findings to improve practice, policy, and social service delivery. Social workers comprehend quantitative and qualitative research and understand scientific and ethical approaches to building knowledge. Social workers

• use practice experience to inform scientific inquiry and

• use research evidence to inform practice.

1. Advanced practitioners in DPMH use advanced strategies to search, appraise, and select for application the most up to date evidence and evolving practice guidelines in the assessment and intervention with influence persons with severe and persistent mental illness and substance use disorders, persons with other mental health issues, and persons with psychiatric disabilities, and their families and communities.

**Educational Policy 2.1.7**—**Apply knowledge of human behavior and the social environment.**

Social workers are knowledgeable about human behavior across the life course; the range of social systems in which people live; and the ways social systems promote or deter people in maintaining or achieving health and well-being. Social workers apply theories and knowledge from the liberal arts to understand biological, social, cultural, psychological, and spiritual development. Social workers

• utilize conceptual frameworks to guide the processes of assessment, intervention, and evaluation; and

• critique and apply knowledge to understand person and environment.

1. Advanced practitioners in DPMH will be able to define mental health, mental illness, and mental well-being.
2. Advanced practitioners in DPMH will be able to compare the various etiology and treatment options for substance abuse and addiction.
3. Advanced practitioners in DPMH understand the relevant organizational world-views and culture that influence persons with severe and persistent mental illness and substance use disorders, persons with other mental health issues, and persons with psychiatric disabilities, and their families and communities. They can relate social work perspectives, the evidence base, and related theories to practice with these groups.
4. They understand and critique the application of relevant social and psychological theory/practice models that inform social work in efforts to adapt them to these clients, their families, and/or their communities.
5. Advanced practitioners understand system resources available to clients across the

life course, and the unique issues facing them in gaining access to and utilizing these resources and reforming policy and delivery systems to address unmet needs.

1. Advanced practitioners understand increased risk and protective factors related to bio-psycho-social-spiritual domains and incorporate them in their assessment and intervention, as well as a range of physical health and recovery issues associated with social stigma and marginalization of persons with mental health diagnoses and psychiatric disabilities.

**Educational Policy 2.1.9**—**Respond to contexts that shape practice.**

Social workers are informed, resourceful, and proactive in responding to evolving organizational, community, and societal contexts at all levels of practice. Social workers recognize that the context of practice is dynamic, and use knowledge and skill to respond proactively. Social workers

• continuously discover, appraise, and attend to changing locales, populations, scientific and technological developments, and emerging societal trends to provide relevant services; and

• provide leadership in promoting sustainable changes in service delivery and practice to improve the quality of social services.

**Educational Policy 2.1.10(a)–(d)**—**Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.**

Professional practice involves the dynamic and interactive processes of engagement, assessment, intervention, and evaluation at multiple levels. Social workers have the knowledge and skills to practice with individuals, families, groups, organizations, and communities. Practice knowledge includes identifying, analyzing, and implementing evidence-based interventions designed to achieve client goals; using research and technological advances; evaluating program outcomes and practice effectiveness; developing, analyzing, advocating, and providing leadership for policies and services; and promoting social and economic justice.

1. Advanced practitioners in DPMH will be able to describe the structure of the DSM IV and conduct an assessment using the DSM criteria and structure.
2. Advanced practitioners in DPMH demonstrate the ability to critically appraise the impact of the social environment on the overall well-being of persons with severe and persistent mental illness and substance use disorders, persons with other mental health issues, and persons with psychiatric disabilities, and their families and communities.
3. Advanced practitioners in DPMH recognize and assess social support systems and socioeconomic resources specific to persons with severe and persistent mental illness and substance use disorders, persons with other mental health issues, and persons with psychiatric disabilities, and their families and communities

**Definition of Evidence-Informed Practice:**

Evidence-informed practice (EIP) is a guiding principal for the UT Arlington-SSW. This approach is guided by the philosophy espoused by Gambrill (2006) and others who discuss evidence-based practice (EBP). Though many definitions of EIP/EBP saturate the literature, we offer two definitions that most closely define our understanding of the concept and serve to explicate our vision of EIP for the UT Arlington-SSW:

The use of the best available scientific knowledge derived from randomized, controlled outcome studies, and meta-analyses of existing outcome studies, as one basis for guiding professional interventions and effective therapies, combined with professional ethical standards, clinical judgment, and practice wisdom (Barker, 2003, p. 149). …..the integration of the best research evidence with our clinical expertise and our patient’s unique values and circumstances (Strauss, et al. (2005).

The UTA SSW vision statement states that the “School’s vision is to promote social and economic justice in a diverse environment.”  Empowerment connects with the vision statement because, as Rees (1991) has pointed out, the very objective of empowerment is social justice.  Empowerment is a seminal vehicle by which social justice can be realized.  It could well be argued that true social justice cannot be realized without empowerment. Empowerment, anchored with a generalist base, directs social workers to address root causes at all levels and in all contexts, not simply “symptoms”.  This is not a static process but an ongoing, dynamic process, a process leading to a greater degree of social justice and equality.

**Definition of Empowerment:** asdefined by Barker (2003:142) as follows:

In social work practice, the process of helping individuals, families, groups, and communities increase their personal, interpersonal, socioeconomic, and political strength and develop influence toward improving their circumstances.

**I. Description of Course Content:** This course is a second-year blended option in the HBSE, Direct Practice sequences. The focus of this course is on current advances in knowledge of the neurobiological underpinnings of human behavior and development, the interaction between those underpinnings and the social context and environment, the relevance to social work practice with individuals, families, groups, programs/organizations, and communities, and related assessment and intervention practice behaviors across several practice domains. The domains include human development, genetics, mental health and substance abuse, cognition, stress and trauma, and violence and aggression. The implications of neurobiological and environmental influences (including public health issues and health disparities) will be examined in terms of social justice, social work values, knowledge, and skills, as well as in terms of the structural and systematic arrangement and delivery of social welfare services at the micro, mezzo, and macro levels.

**II. Competency-Based Performance Outcomes for Advanced Skills and Practice Behaviors:** Upon completion of this course, the participant will be able to:

1. Synthesize current knowledge on the parts of the human central nervous system and know their functions, so as to be able to read and interpret relevant new scientific information (such as that in news publications and in communications from primary care practitioners and specialists), and so to inform their practice behaviors and understanding of target behavior/social problems.
2. Distinguish among sources of knowledge to synthesize and apply appropriate neuroscientific information needed to make an intervention plan, design a program/delivery system, or develop a policy for at least two target populations.
3. Critique and propose modifications to an intervention plan, policy, delivery system, or program which does not utilize appropriate, up-to-date neuroscientific information as its foundation.
4. Enhance critical thinking about the interface between human biology/neuroscience and social work practice at the micro and macro levels, so that they can analyze the biological aspects of a practice problem, such as models of assessment, and consider it in making practice decisions.
5. Demonstrate the collection, organization, and interpretation of client biopsychosocial data within an assessment at the micro or macro level.
6. Demonstrate the synthesis and application of biopsychosocial data within an intervention plan at the micro or macro level.
7. Evaluate practice outcomes related to neurobiological and environmental interactions.

**III. Textbooks:**

***Required:***

American Psychological Association (2010). *Publication manual of the American Psychological Association* (6th ed.)*.* Washington, D.C.: American Psychological Association.

Johnson, H. C. (2014). *Behavioral neuroscience for the human services.* New York: Oxford University Press.

Ray, W.J. (2014). *Abnormal psychology: Neuroscience perspectives on human behavior and experience.* Thousand Oaks, CA: Sage Publications.

***Highly Recommended:***

Applegate, J.S. and Shapiro, J.R. (2005). *Neurobiology for clinical social work: Theory and practice.* New York: Norton.

Carlson, N. R. (2013). *Physiology of behavior.* (11th edition). Upper Saddle River, NJ: Pearson Publishing.

Donders, J. and Hunter, S.J. (eds.). (2010). *Principles and practice of lifespan developmental neuropsychology.* Cambridge, UK: Cambridge University Press.

Farmer R.L. (2009). *Neuroscience and social work practice.* Thousand Oaks, CA: Sage.

Kolb, B. and Whishaw, I.O. (2012). *An introduction to brain and behavior,* (4th edition). New York: Worth Publishers.

**IV. Course Outline/Topics and Readings.** *As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. – Bruce L. Bower.*

**Date** **Topic(s)** **Readings**

Aug. 22 & 29 Introductions Ray, Ch. 3

Presuppositions and Johnson Parts I, II, and

Foundations Ch. 19,20

Sep. 05 & Sep. 12 Domain #1 – Human Ray, Ch. 6, 16

Development Johnson, Ch. 33-37

Sep. 19 & 26 Domain #2 – Mental health Johnson, Part VI

**[Article Critique #1 due Sep. 19th]** Ray, Ch.7, 8, 15

Oct. 03 & 10 Domain #3 – Substance abuse Johnson, Part IV

**[Article Critique #2 due Oct. 03rd]** Ray, Ch. 12, 14

Oct. 17 & 24 Domain #4 – Cognition Ray, Ch. 10. 11

(Emotion, learning, and Johnson, Ch. 38

Memory)

**[Article Critique #3 due Oct. 17th]**

Oct. 31 & Nov. 07 Domain #5 – Stress & trauma Ray, Ch. 9, 11

**[Article Critique #4 due Oct. 31st]** Johnson, Ch. 23, 24

Nov. 14 & 21 Domain #6 – Violence & Assigned readings

Aggression in Blackboard

**[Major paper due Nov. 14th]**

**V. Assignments:**

1. **Journal article critiques:** You will be expected to find, read, and critically evaluate four peer-reviewedjournal articles that specifically deals with the domains discussed in class; it is your choice as to which ones. They are due on the dates given in the class outline above. These critiques are to be 3-5 pages in length, and are to follow standard APA formatting, and should contain at least three additional references and not be more than five years old. They will count for 40% of the final grade. In your write-up you will need to address the following areas:

* title, author, date, and source
* a summary of the study
* discuss the strengths and limitations
* discuss your interpretation of the findings or conclusions
* discuss how you would apply the findings of this research to your work with clients
* discuss how and to what extent this research addresses issues of diversity and oppression (if at all)
* discuss what future research this might involve, preferably not already mentioned in the article

1. **Major paper:** This will be an opportunity to apply up-to-date knowledge of neurobiological underpinnings associated with human brain development/change related to a specific environmental factor during a specific life stage or trajectory from the topics below. Search for and critically analyze recent peer-reviewed neuroscientific research on them (the number of sources will vary by topic), and summarize what you have learned about the neurobiological underpinnings of the factor, with implications for social work practice, in **no less than 10 and no more than 15 pages (APA style) plus references due November 14th by the end of day.** This assignment will count for 50% of the final grade.

Select one of the following topics (environmental factor is italicized):

1) Neurobiological underpinnings for the effects of prenatal *maternal nutrition and breastfeeding* on a selected domain of infant development (e.g., speech and language, cognitive, growth);

2) Child neurobiological underpinnings of “best fit” *parental temperament and child-rearing practices* at specific brain development stages (e.g., neonatal, infancy, toddlerhood);

3) Neurobiological effects on development of a *mild traumatic brain injury* experienced between the ages of 18-25 in a typically developing human;

4) Implications of typical brain changes in aging for the effects of “best fit” *social support systems and environmental modifications* for the elderly.

5) Neurobiological underpinnings for effects of *substance abuse* and process of addiction at a specific life stage/age.

6) Implications of the neuroscience evidence on the relationship between motor and perceptual development in infants for *child-rearing environments.*

**Note: All papers are to be handed in via email by midnight of the due date, except as by special permission by the instructor. \*\*\*No late papers will be accepted.\*\*\***

The file format should appears as follows: [your ***last*** name]\_6320\_001\_[assignment name or number].

For example, using my name:

**bower\_6320\_001\_comparison**

**OR**

**bower\_6320\_001\_assignment2**

**VI. Grading Policy**:

The following list of course requirements and percentages will be utilized:

Journal Article Critiques (6) 40%

Major Paper 50%

Class participation 10%

Total 100%

Course Grading Scale.

The following scale will be used for calculating an overall course grade:

Grade Percentage Points

A 100% - 90% 4.0

B 89% -80% 3.0

C 79% -70% 2.0

D 69% - 60% 1.0

F 59% and below 0.0

**VII. Attendance Policy:** It is expected that you attend class and participate in class discussions. Each class missed is a significant loss of instruction. Your final grade will be affected by the extent to which you participate in the class discussions; obviously you will not be able to participate you aren’t there. This will count for 10% of you final grade.

**VIII. Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/aao/fao/>).

**IX. Americans with Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**X. Academic Integrity:** Students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents’ Rule* 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

**XII**. **Student Support Services**:UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to [resources@uta.edu](mailto:resources@uta.edu), or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

For writing assistance, Dr. Chris Kilgore is available to critique writing and to provide any other writing help you may need. He can be reached at [ChrisKilgore@uta.edu](mailto:ChrisKilgore@uta.edu).

**XIII. Electronic Communication:** UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

**Although I do understand our heavy reliance on computers, use of electronic equipment in this class is not allowed, except audio/video recording devices and for the purpose of note-taking and other class related activities. This includes laptop and tablet computers, music players, and cell phones (smart or otherwise). It is distracting and disrespectful to me and to others in the class. If you have a *bon fide* emergency, please leave the classroom and take the call elsewhere. On the other hand if you are seen using your electronic devices you will be asked to leave for that class and that will be counted as an absence.**

**XIV. Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

**XV. Final Review Week:** A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**XVI. Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building; students should exit the room and move toward the nearest exit, which is located to the left of the classroom door out to the breezeway. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

**XVII. Librarian to Contact:**  John Dillard, 817-272-7518, [dillard@uta.edu](mailto:dillard@uta.edu)

Library Home Page <http://www.uta.edu/library>

Subject Guides <http://libguides.uta.edu>

Subject Librarians <http://www.uta.edu/library/help/subject-librarians.php>

Database List <http://www.uta.edu/library/databases/index.php>

Course Reserves <http://pulse.uta.edu/vwebv/enterCourseReserve.do>

Library Catalog <http://discover.uta.edu/>

E-Journals <http://liblink.uta.edu/UTAlink/az>

Library Tutorials <http://www.uta.edu/library/help/tutorials.php>

Connecting from Off- Campus <http://libguides.uta.edu/offcampus>

Ask A Librarian [http://ask.uta.edu](http://ask.uta.edu/)

**XVIII. Make-up Quiz/Late Assignments Policy:** There will be no make-up quizzes except in extreme circumstances. No late papers will be accepted, again with the exception of extreme circumstances. No "Incomplete” grades will be given for this class.

**XIX. Grade Grievance Policy:** Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current graduate catalog, see <http://grad.pci.uta.edu/about/catalog/current/general/regulations/#gradegrievances>

**XX. Bibliography.**

**All posted items on the BlackBoard site for this course are part of the course materials; these are the result of a systematic review for social work-relevant neuroscience meta-analyses and systematic reviews published in peer-reviewed journals in the last 10 years. They will be updated each semester, and so are not included on this core bibliography.**

Cohen, D. (1988). Social work and psychotropic drug treatments. *Social Service Review, 62*(4), 576-599.

Cohen, D. (1989). Good intentions are not enough. *Social Service Review, 63*(4), 661-665.

Cornelius, L. (2000). Having limited choices for medical care: does it lead to delays in seeking care for minority populations? In C. Hogue (Ed.), *Minority health in America* (p. ). Baltimore, MD.: Johns Hopkins University Press.

Council on Social Work Education (2008). *Handbook of Accreditation Standards and Procedures*. Washington, D.C.: CSWE.

Farmer, R., & Bentley, K. J. (2001). Social workers as medication facilitators. In K.J. Bentley (Ed.), *Social work practice in mental health: contemporary roles, tasks and techniques* (pp. 211-219). Pacific Grove, CA.: Brooks/Cole.

Geddes, J. (2004). Bipolar disorders. *Clinical Evidence Mental Health, 11,* 13-31.

Ginsberg, L., Nackerud, L., & Larrison, C. R. (2004). *Human biology for social workers.* Boston: Pearson Education, Inc..

Gunnar, M. R., & Thelen, E. (Eds.). (1989). *Systems and development: the Minnesota symposia on child psychology, Vol. 22.* Hilsdale, NJ.: Lawrence Erlbaum Associates, Inc..

Haroutunian, S. (1983). *Equilibrium in the balance: A study of psychological explanation.* New York: Springer-Verlag.

Holmes, E. M. (1996/1997). Solving the insurance/genetic fair/unfair discrimination dilemma in light of the human genome project. *Kentucky Law Journal, 85*(3), 503-664.

Johnson, H. C. (1984). The biological bases of psychopathology. In F.J. Turner (Ed.), *Adult Psychopathology* (p. ). New York: Free Press.

Johnson, H. C. (1987). Biologically based deficit in the identified patient: indications for psychoeducational strategies. *Journal of Marital and Family Therapy, 13*(4), 337-348.

Johnson, H. C. (1989). Disruptive children: biological factors in attention deficit and antisocial disorders. *Social Work, 34,* 137-144.

Johnson, H. C. (1989a). Resisting the evil empire: comments on "Social work practice and psychotropic drug treatment'. *Social Service Review, 63*(4), 657-660.

Johnson, H. C. (1996). Violence and biology: a review of the literature. *Families in Society, 77*, 3-18.

Johnson, H. C. (2004). *Psyche, synapse, and substance: the role of neurobiology in emotions, behavior, thinking, and addiction for non-scientists* (2nd Ed.)*.* Greenfield, MA.: Deerfield Valley Publishing.

Johnson, H. C., Atkins, S. P., Battle, S. F., Hernandez-Arata, L., Hesselbrock, M., Libassi, M. G., Parish, M. (1990). Strengthening the "bio" in the biopsychosocial paradigm. *Journal of Social Work Education, 26*(2), 109-123.

Lemert, Charles. (2009). *Social theory: The multicultural and classic readings* (3rd ed.). Boulder, CO.: Westview Press.

Lezak, M. D. (1995). *Neuropsychological assessment* (3rd. ed.). New York: Oxford University Press.

Mange, E. J., & Mange, A. P. (2001). *Basic human genetics* (3rd. ed.). Sunderland, MA.: Sinauer Associates, Inc..

Mowbray, C. T., & Holter, M. C. (2002). Mental health and mental illness: out of the closet? *Social Service Review, 76,* 134-179.

Oyama, S. (1985). *The ontogeny of information: developmental systems and evolution.* Cambridge, England: Cambridge University Press.

Pope, G. C. (2000). *The biological bases of human behavior.* Boston: Allyn and Bacon.

Rauch, J. B., & Tivoli, L. (1989). Social workers' knowledge and utilization of genetic services. *Social Work, 32,* 55-56.

Robbins, S.P., Chatterjee, P., Canda, E.R. (2006). *Contemporary human behavior theory: A critical perspective for social work.* Boston, MA. Pearson.

Rutter, M. (1998). Developmental catch-up and deficit following adoption after severe early global privation. *Journal of Child Psychology and Psychiatry, 39*(4), 465-476.

Sacks, O. (1998). *The man who mistook his wife for a hat.* New York: Touchstone.

Saleebey, D. (1985). In clinical social work practice, is the body politic? *Social Service Review, 59,* 578-592.

Saleebey, D. (1992). Biology's challenge to social work: embodying the person-in-environment perspective. *Social Work, 37*(2), 112-118.

Spence, R. T., DiNitto , D. M., & Straussner, S. L. (Eds.). (2001). *Neurobiology of addictions: implications for clinical practice.* New York: The Haworth Press, Inc..

Thelen, E. (1987). We think, therefore we move. *Cahiers de Psychologie Cognitive- Current Psychology of Cognition, 7*(2), 195-198.

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