

# CULTURAL NEUROSCIENCE

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# CULTURAL NEUROSCIENCE

- \* Culture is of central importance in health and medicine.
- \* Culture influences brain function and behavior.
- \* Cultural factors serve an important role as a protective factor in the mediation or moderation of risk of mental disorders.
- \* Cultural differences in cognition and brain function contribute to the understanding of the functional processes that subserve mental health.

# CULTURE IN PEACE AND JUSTICE

- The UN Sustainable Goals Program has identified peace and justice as a priority domain that promotes human development and human fulfillment.
- The achievement of goal objectives of peace and justice are paramount to the health and human security.
- The Global Partnership for Development is important for the promotion of the research priorities that ensure human development and human fulfillment.

# CULTURE IN HEALTH AND MEDICINE

- The consideration of culture is fundamental to the understanding of the societal concerns and interests in health and medicine.
- Cultural interests are foundational to the consideration of interests of health and health equity.
- The equitable resources of societal conditions is fundamental to equity in health and medicine.
- The equitable access to information and data of societal and educational resources is central to health equity.

# CULTURE AND HEALTH

- Cultural factors contribute to the prevention and intervention of health.
- Cultural considerations are central to the understanding of the strategies of prevention and intervention of health.
- Evidence-based resources of culture and health are fundamental to the development of resources in health and medicine.
- Knowledge-based resources of culture and health ensure the equitable distribution and access to data and information for the improvement of health and societal conditions of the population.

# CULTURE AND EVIDENCE-BASED MEDICINE

- Culture is foundational to the understanding of the interests and concerns of health and medicine.
- Cultural factors contribute to the prevention and intervention of health and disease in medicine.
- Evidence-based approaches to culture and health contribute to the quality of data and information that inform the development of prevention and intervention strategies of health and medicine.
- Evidence-based resources are foundational to the building of capabilities of health and medicine for the prevention and treatment of disease.
- Culture and evidence-based medicine are fundamental to the amelioration of disease.

# CULTURE AND MEDICINE

- Cultural considerations are of importance to the prevention and treatment of disease in health and medicine.
- Cultural differences contribute to the conceptualization of health and disease.
- Cultural factors affect the prevention and intervention of health.
- Culture is central to the promotion of the highest standards of health.

# CULTURAL NEUROSCIENCE AND THE RESEARCH DOMAIN CRITERIA

- Research on cultural neuroscience contributes to the understanding of cultural differences in brain function and behavior.
- Cultural differences in brain function and behavior contribute to the understanding of fundamental biobehavioral dimensions and observable behavior.
- Cultural factors serve as protective factors in the understanding of health and disease.
- The understanding of cultural differences contributes to the societal appreciation of the wide range of human variation of populations and cultures.

(Chiao, Turner, Li, Lee-Tauler, 2020, *Neuroscience and Biobehavioral Review*)



# CULTURE AND BEHAVIOR

- Culture is fundamental to the dimensional aspects of behavior.
- Cultural dimensions are of importance to the understanding of cultural differences in behavior.
- Cultural differences in behavior contribute to the understanding of the universalism and cultural diversity of behavior.
- The understanding of cultural differences are of importance to the understanding of behavior in cultural context.

# CULTURE, COGNITION AND BEHAVIOR

- Cultural influences on cognition are of importance to the understanding of cultural differences in thought.
- Cultural differences in cognition contribute to the understanding of distinct thinking styles.
- Culture shapes cognitive and behavioral development throughout the lifespan.
- Culture serves as a protective factor in the changes of cognition and behavior in aging.

# CULTURE, BRAIN FUNCTION AND BEHAVIOR

- Cultural influences on brain function contribute to behavior.
- Cultural differences in cognition and brain function show the malleability of the functional mechanisms of behavior.
- Cultural influences on brain function illustrate the malleability of functional plasticity and brain activity on behavior.
- Cultural differences in functional and behavioral expression detail the role of change on the manifestation of behavior.

(Chiao & Ambady, 2007)

# CULTURE AND EMOTION

- Culture is of importance to the manifestation of sensation and emotion.
- Culture shapes the phenomenological and physiological states of feeling and emotion.
- Cultural differences of emotion contribute to the recognition and expression of behavior.
- Culture is important to the control and regulation of emotion and behavior.

# CULTURE AND THE SELF

- Culture is foundational to the understanding of self and others.
- Cultural differences in the understanding of self and others illustrates distinct styles of social thought.
- Cultural influences on self concept contribute to cultural and social representation.
- Culture shapes the functional mechanisms of behavioral and social adaptation.

# CULTURE AND SOCIAL COGNITION

- Culture contributes to the development of social thought.
- Cultural influences on social and cognitive processes show the role of distinct thinking styles on social behavior.
- Cultural differences in social cognition demonstrate the role of cognitive processes on social behavior.
- Cultural differences in social cognition detail the role of cognition in higher-level processes.

# CULTURE, COGNITION AND BRAIN FUNCTION

- Cultural influences on cognition and brain function show the role of cultural factors on brain-behavior relationships.
- Cultural differences in cognition and brain function contribute to the understanding of the role of culture in changes of cognition and brain function.
- Cultural factors contribute to the buffering of the changes of cognition and brain function that arise during aging.
- Cultural factors alter the cognitive malleability for the improvement of the functioning of cognition and brain function in aging.

(Park & Gutchess, 2002, *Neuroscience and Biobehavioral Review*)

# CULTURE, COGNITION AND AGING

- Cultural differences in cognition arise from the changes of cognition and brain function in aging.
- Cultural differences in functional dedifferentiation and cortical malleability alter the cognitive processes of aging.
- Cultural influences on the cognition contribute to the distinct strategies that are of importance to the prevention of disease.
- Cognitive rehabilitation from the deterioration of cortical mechanisms and cognition in aging is of importance to the prevention and treatment of disease.



# CULTURE AND THE LIFE SPAN PERSPECTIVE

- Culture shapes the biobehavioral development across the lifespan.
- Cultural influences on cognitive and behavioral development contribute to the changes of cognition and brain function that arise due to growth and learning.
- Cultural influences on cognition and brain function show the changes in skills and knowledge that are fundamental to human development.
- Culture is of importance to the core competencies that are fundamental to life long learning.

# CULTURE IN HEALTH AND HUMAN DEVELOPMENT

- The development of core competencies is foundational to health and human development.
- The study of neurodevelopmental trajectories of core capacities and behavior is important to the understanding of the changes of brain maturation and behavioral development.
- The maturation of brain development contributes to the acquisition of skills and knowledge of behavioral development.
- The changes of brain maturation and behavioral development are important in the development of core competencies.

(Chiao, 2018, *Developmental Review*)

# CULTURE AND ENVIRONMENT

- Culture is foundational to the understanding of cultural congruence of the environment.
- The interaction with the cultural environment contributes to the access to resources that are of importance to health.
- The interaction with the cultural environment is of importance to the material resources of cultural representation.
- The cultural environment is foundational to the equitable access to resources that contributes to the improvement of health and societal outcomes.

(Chiao et al., 2021)

# ADVANCES IN CULTURAL NEUROSCIENCE

- Advances in cultural neuroscience contribute to the innovation of science and technology in health and medicine.
- The advancement of tools and technologies of the capabilities in health and medicine contribute to health equity.
- The development of culturally- and ethnically-appropriate tools and technologies of scientific and technological innovation lead to the improvement of the capabilities in health and medicine that improve societal and health outcomes.
- The advancement of international cooperation and scientific infrastructure on cultural neuroscience is foundational to the development and innovation of science and technology that leads to equality and the promotion of culture, health and society.

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