

Supplementary File

Nursing Theory Textbook	Meta-theory in index	Definition of meta-theory	Meta-theory and author mentioned in text	Example of nursing meta-theory
Alligood, M. (2014). Nursing Theory: Utilization and Application, 5th ed. St. Louis, MO: Elsevier- Mosby.	No	None	No	None
Alligood, M. (2014). Nursing Theorists and Their Work (8th ed.). St. Louis, Mo.: Elsevier- Mosby.	No	None	Yes Barker & Buchanan-Barker Paterson & Zderad, Theory of Humanistic Nursing Ray & Turkel	Yes Barker's Tidal Model Relational caring complexity theory
Alligood, M. & Tomey, A. (2010). Nursing Theorists and Their Work (7th ed.). St. Louis, MO: Elsevier- Mosby.	No	None	Yes Ray & Turkel Paterson & Zderad, Theory of Humanistic Nursing Barker & Buchanan-Barker	Yes Relational caring complexity theory Barker's Tidal Model
Butts, J. & Rich, K. (2011). Philosophies and Theories for Advanced Nursing Practice (1st ed.). Sudbury, Mass.: Jones and Bartlett Publishers.	Yes	Yes	Yes Paterson & Zderad	Yes Theory of Humanistic Nursing
Chinn, P. & Kramer, M. (2015). Knowledge Development in Nursing: Theory and Process (9th ed.). St. Louis, MO: Elsevier/ Mosby.	No	Yes	No	None
Chinn, P. & Kramer, M. (2004). Knowledge Development in Nursing: Theory and Process (6th ed.). St. Louis, MO: Elsevier/ Mosby.	Yes	Yes	Yes Dickoff and James	None
Cody, W. (2008). Philosophical and Theoretical Perspectives for Advanced Nursing Practice (4th ed.). Sudbury, Mass.: Jones and Bartlett.	Yes	No	No	None
Davidson, A., Ray, M., & Turkel, M. (2011). Nursing, Caring, and Complexity Science: For Human Environment Well-Being. New York: Springer Publishers	No	None	Yes Ray & Turkel	Yes Relational caring complexity theory
Fawcett, J. (2016). Applying Conceptual Models of Nursing. New York: Springer.	No	None	No	None
Fawcett, J. & DeSanto-Madeya, S. (2012). Contemporary Nursing Knowledge: Analysis and Evaluation of Nursing Models and Theories (3rd ed.). Philadelphia: F.A. Davis.	No	None	No	None
Fitzpatrick, J. J. & Whall, A. L. (2016). Conceptual Models of Nursing: Global Perspectives. 5th ed. Upper Saddle River, NJ: Pearson Health Science.	No.	None	None	None
George, J. B. (2011). Nursing Theories: The Base for Professional Nursing Practice. 6th ed. Upper Saddle River, NJ: Pearson Health Science.	No	Yes	Yes Paterson & Zderad	Yes Theory of Humanistic
Kim, H. (2010). The Nature of Theoretical Thinking in Nursing (3rd ed.). New York: Springer Pub. Co.	Yes	Yes	None	None
McEwen, M. & Willis, E. M. (2014). Theoretical Basis for Nursing. 4th ed. Philadelphia, PA: Wolters Kluwer.	Yes	Yes	Yes Dickoff& James; Barker's Tidal Model classified as a high middle range nursing theory.	None
Neuman, B. & Fawcett, J. (2011). The Neuman Systems Model (5th ed.). Upper Saddle River, NJ: Pearson.	No	No	No	None

Continue...

Nicoll, L. (1997). Perspectives on Nursing Theory (3rd ed.). Philadelphia: Lippincott.	Yes	Yes	Yes Dickoff& James; Paterson & Zderad, Humanistic Practice Nursing Theory	None
Reed, P. & Shearer, N. (2012). Perspectives on Nursing Theory. 6th ed. Philadelphia, PA: Wolters Kluwer.	Yes	Yes	Yes Dickoff& James	None
Risjord, M. (2010). Nursing Knowledge. Chichester, West Sussex: Wiley-Blackwell.	Yes	None	Yes Dickoff& James; Paterson & Zderad, Humanistic Practice Nursing Theory	None
Rodgers, B. & Knafl, K. (1999). LIC - Concept Development in Nursing (2nd ed.). Philadelphia, PA: Elsevier/Saunders.	No	None	No	None
Roy, S. & Andrews, H. (2009). The Roy Adaptation Model (3rd ed.). New York: Pearson.	No	No	No	None
Roy, C. & Jones, D. (2006). Nursing Knowledge Development and Clinical Practice. New York: Springer Pub. Co.	No	No	No	None
Sitzman, K. & Watson, J. (2013). Caring Science, Mindful Practice. New York: Springer.	No	None	Complexity Integration Nursing Theory	None
Smith, M. & Parker, M. (2015). Nursing Theories and Nursing Practice (4th ed.). Philadelphia: F.A. Davis.	No	No	Yes Barbara Montgomery Dossey (Debate if metatheory or grand theory) Ray and Turkel, Relational Caring Complexity Theory	Yes Theory of Integral Nursing
Walker, L. O. & Avant, K. C. (2011). Strategies for Theory Construction. 5th ed. Upper Saddle River, NJ: Pearson Prentice Hall.	Yes	Yes	Yes	None
Ziegler, S. (2005). Theory-directed Nursing Practice (2nd ed.). New York: Springer Pub. Co.	No	None	No	None

Table 1: Evaluation of Metatheory in 26 Nursing Theory Textbooks Frequently Required for Nursing Courses in the United States of America.

Evidence of Metatheory (APA Citation)	Comments
<p>Nursing Aerohemodynamics Metatheory Sredl, D. (1983). Airborne patient care management: A multidisciplinary approach. St. Louis: Medical Research Associates Publications. Sredl, D. (2008). Conceptual model: The aerohemodynamics metatheory. Teaching & Learning in Nursing, 3(4), 115-120. doi:10.1016/j.teln.2008.04.003</p>	Comprehensive with a focus on flight nursing. Discusses both a conceptual model and the aerohemodynamics metatheory, however, may in actuality be a practice theory for flight nursing.
<p>Paterson and Zderad's Humanistic Nursing Theory Nursing Metatheory Paterson, J. G., & Zderad, L. T. (1988). Humanistic Nursing. New York: National League for Nursing Press. O'Connor, N. A., & Paterson, J. G. (1993). Paterson and Zderad: Humanistic Nursing Theory. Newbury Park: Sage Publications. Paterson, J., & Zderad, L. (2007). Humanistic Nursing. Project Gutenberg eBook, Retrieved from http://www.gutenberg.org/files/25020/25020-8.txt McCamant, K. L. (2006). Humanistic Nursing, Interpersonal Relations Theory, and the Empathy-Altruism Hypothesis. Nursing Science Quarterly,19(4), 334-338. doi:10.1177/0894318406292823 Wu, H., & Volker, D. L. (2011). Humanistic Nursing Theory: Application to hospice and palliative care. Journal of Advanced Nursing,68(2), 471-479. doi:10.1111/j.1365-2648.2011.05770.x Silva, T. N. (2013). Paterson and Zderad's Humanistic Theory: Entering the Between Through Being When Called Upon. Nursing Science Quarterly,26(2), 132-135. doi:10.1177/0894318413477209</p>	Paterson and Zderad focused on humanistic nursing and interpersonal relationships. "The book was originally written to define the Humanistic Nursing Theory which presented a way for each nurse to become-more as a person and to extend that becoming-more to the community of nurses in which he or she practices" [41]

Table 2: Continue..

<p>Theory of Relational Caring Complexity Nursing Metatheory Turkel, M. A., & Ray, M. A. (2000). Relational Complexity: A theory of the nurse-patient relationship within an economic context. <i>Nursing Science Quarterly</i>, 13(4), 307-313. ISSN: 08943184 Turkel, M. C., & Ray, M. A. (2001). Relational complexity: From grounded theory to instrument and theoretical testing. <i>Nursing Science Quarterly</i>, 14(4), 281-287. ISSN: 0894-3184; PMID: 11873364 Version: 1. Davidson, A., Ray, M., & Turkel, M. (2011). <i>Nursing, Caring, and Complexity Science: For Human Environment Well-Being</i>. New York: Springer Publishers. Ray, M. A., & Turkel, M. C. (2012). A Transtheoretical Evolution of Caring Science within Complex Systems. <i>International Journal for Human Caring</i>, 16(2), 28-39. Ray, M. A., & Turkel, M. C. (2014). Caring as Emancipatory Nursing Praxis: The theory of relational caring complexity. <i>Advances in Nursing Science</i>, 37(2), 132-146. doi:10.1097/ans.000000000000024</p>	<p>Rational Caring Complexity Theory derived from sociology and built on Bureaucratic Nursing Theory foundation.</p>
<p>Nursing Metatheory Tidal Model Barker, P., & Buchanan-Barker, P. (2007). <i>The Tidal Model: Mental health, recovery, and reclamation</i>. Newport on Tay: Clan Unity International. (E-book regarding Tidal Model). Barker, P. (2000a). The Tidal Model of mental health care: Personal caring within the chaos paradigm. <i>Mental Health Care</i>, 4(2), 59–63. Barker, P. (2000b). The Tidal Model: The lived experience in person-centred mental health care. <i>Nursing Philosophy</i>, 2(3), 213–223. Doi: 10.1046/j.1466-769X.2000.00062.x Barker, P. (2001). The Tidal Model: Developing an empowering, person-centered approach to recovery within psychiatric and mental health nursing. <i>Journal of Psychiatric & Mental Health Nursing</i>, 8(3), 233-240. doi:10.1046/j.1365-2850.2001.00391.x Barker, P. (2001a). The Tidal Model: A radical approach to person-centred care. <i>Perspectives in Psychiatric Care</i>, 37(3), 79–87. Doi: 10.1111/j.1744-6163.2001.tb00631.x Barker P (2001) The Tidal Model: Developing a Person-Centered Approach to Psychiatric and Mental Health Nursing. <i>Perspectives in Psychiatric Care</i>, 37(3), 79-87. ISSN: 0031-5990 ; E-ISSN: 1744-6163; (DOI: 10.1111/j.1744-6163.2001.tb00631.x) Barker, P. (2002). The Tidal Model: The healing potential of metaphor within the patient's narrative. <i>Journal of Psychosocial Nursing and Mental Health Services</i>, 40(7), 42–50. ISSN 02793695 Stevenson, C., & Fletcher, E. (2002). The Tidal Model: The questions answered. <i>Mental Health Practice</i>, 5(8), 29–38. doi: 10.7748/mhp2002.05.5.8.29.c1721 Barker, P. (2003a). The Tidal Model: Psychiatric colonisation, recovery and the paradigm shift in mental health care. <i>International Journal of Mental Health Nursing</i>, 12(2), 96–102. doi:10.1046/j.1440-0979.2003.00275.x Barker, P., & Buchanan-Barker, P. (2003). <i>The Tidal Model: Psychiatric Colonization, Recovery, and the Need for a Paradigm Shift in Mental Health Care (Workshop 1 and 4 Handout)</i>. Proceedings of the 2006 International Recovery Perspectives Conference. Retrieved from http://familymentalhealthrecovery.org/?s=Tidal+mODEL Barker, P. (2004). Uncommon sense: The Tidal Model of mental health recovery. <i>New Therapist</i>, 33(Sept/Oct), 14–19. Buchanan-Barker, P. (2004). Uncommon sense: The Tidal Model of mental health recovery. <i>Mental Health Nursing</i>, 23(1), 12–15. Gordon, W., Morton, T., & Brooks, G. (2004). The Tidal Model and the reform of nursing practice. (Unpublished report). Available: http://www.tidalmodel.com/THE%20TIDAL%20MODEL%20Birmingham%20Report.htm Barker, P., & Buchanan-Barker, P. (2005). <i>The Tidal Model: A Guide for Mental Health Professionals</i>. East Sussex, UK: Brunner-Routledge. Barker, P., & Buchanan-Barker, P. (2005). <i>The Tidal Model: A guide for mental health professionals</i>. London, Brunner-Routledge. Cook, N. R., Phillips, B. N., & Sadler, D. (2005). The Tidal Model as experienced by patients and nurses in a regional forensic unit. <i>Journal of Psychiatric and Mental Health Nursing</i>, 12(5), 536–540. doi: 10.1111/j.1365-2850.2005.00872.x Gordon, W., Morton, T., & Brooks, G. (2005). Launching the Tidal Model: Evaluating the evidence. <i>Journal of Psychiatric and Mental Health Nursing</i>, 12(6), 703-712. doi:10.1111/j.1365-2850.2005.00901.x Whitehill, I. (2005). Foreword. In P. Barker & P. Buchanan-Barker (Eds.), <i>The Tidal Model: A guide for mental health professionals</i> (pp. xiv–xvi). London: Brunner-Routledge. Berger, J. L. (2006). Incorporation of the Tidal Model into the interdisciplinary plan of care—a program quality improvement project. <i>Journal of Psychiatric and Mental Health Nursing</i>, 13(4), 464–467. doi:10.1111/j.1365-2850.2006.01007.x</p>	<p>Comprehensively developed specifically for psychiatric and mental health nursing; widely adapted in the United Kingdom (England, Ireland, Scotland, and Wales), as well as internationally. Extensive research and publications regarding Tidal Model. A debated surfaced questioning if Tidal Model was a metatheory or a high-level mid-range theory.</p>

Table 2: Continue..

<p>Brookes, N. (2006). Tidal model of mental health recovery. In A. M. Tomey & M. R. Alligood (Eds.). <i>Nursing Theorists and Their Work</i> (pp. 696–717). St. Louis, MO: Mosby, Inc.</p> <p>Buchanan-Barker, P., & Barker, P. (2006). The Ten Commitments: A valuebase for mental health recovery. <i>Journal of Psychosocial Nursing and Mental Health Services</i>, 44(9), 29–33.</p> <p>Lafferty, S., & Davidson, R. (2006). Person-centred care in practice: An account of the experience of implementing the Tidal Model in an adult acute admission ward in Glasgow. <i>Mental Health Today</i>, (March), 31–34.</p> <p>Barker, P., & Buchanan-Barker, P. (2007). <i>The Tidal Model: Mental Health, Reclamation, and Recovery</i>. London: Brunner-Routledge.</p> <p>Barker, P. (April 2008). The Tidal Metaphor. Tidal Model Newsletter. Retrieved from http://tidal-model.com/Tidal%20Newsletters.htm</p> <p>Barker, P., & Buchanan-Barker, P. (2008a). This tide's already changed. Retrieved August 28, 2008, from http://www.psychminded.co.uk/news/news2008/April08/phil_barker003.htm</p> <p>Barker, P., & Buchanan-Barker, P. (2008b). Reclaiming nursing: Making it personal. <i>Mental Health Practice</i>, 11(9), 12–16. doi:10.7748/mhp2008.06.11.9.12.c7703</p> <p>Buchanan-Barker, P., & Barker, P. (2008). The Tidal Commitments: Extending the value base of recovery. <i>Journal of Psychiatric and Mental Health Nursing</i>, 15(2), 93–100. doi: 10.1111/j.1365-2850.2007.01209.x</p> <p>Barker, P., & Buchanan-Barker, P. (2010). The TIDAL MODEL of Mental Health Recovery and Reclamation: Application in Acute care Settings. <i>Issues in Mental Health Nursing</i>, 31(3), 171–180. doi: 10.3109/01612840903276696</p> <p>Barker, P., & Buchanan-Barker, P. (2012a). Tidal Model theory: The model of the person. Retrieved from http://tidal-model.com/Theory.htm</p> <p>Barker, P., & Buchanan-Barker, P. (2012b). Royal Ottawa Hospital. Retrieved from http://tidal-model.com/Royal%20Ottawa%20Hospital.htm</p> <p>Barker, P., & Buchanan-Barker, P. (2012c). An example of a staff leaflet. The Tidal Model. Retrieved from http://tidal-model.com/Material%201.htm</p> <p>Barker, P., & Buchanan-Barker, P. (2012d). The ten commitments. The Tidal Model. Retrieved from http://tidal-model.com/Ten%20Commitments.htm</p> <p>Kilmer, D. L., & Lane-Tillerson, C. (2013). When Still Waters Become a Soul Tsunami. <i>Journal of Christian Nursing</i>, 30(2), 100–104. doi:10.1097/cnj.0b013e31825b8d73</p> <p>Complexity Integration Nursing Theory</p> <p>Van Sell, S. L., & Kalofissudis, I. A. (2002). <i>The Evolving Essence of the Science of Nursing: The Complexity Integration Nursing Theory</i>. Chania, Crete Greece: The Authors.</p> <p>Meintz, S., Yfantis, E., & Graebel, W. (1994). Future directions in computational nursing sciences. <i>Mathematical and Computer Modelling</i>, 19(6-8), 273–288. doi:10.1016/0895-7177(94)90199-6</p> <p>Butt, G. (2008). Stigma in the context of hepatitis C: Concept analysis. <i>Journal of Advanced Nursing</i>, 62(6), 712–724. doi:10.1111/j.1365-2648.2008.04641.x</p> <p>Binner, M., Ross, D., & Browner, I. (2011). Chemotherapy-Induced Peripheral Neuropathy: Assessment of Oncology Nurses' Knowledge and Practice. <i>Oncology Nursing Forum</i>, 38(4), 448–454. doi:10.1188/11.onf.448-454</p> <p>Jeffery, A. D., Mutsch, K. S., & Knapp, L. (2014). Knowledge and Recognition of SIRS and Sepsis Among Pediatric Nurses. <i>Pediatric Nursing</i>, 40(6), 271–278.</p>	<p>Comprehensive, unifying metatheory for the nursing profession that articulates overarching nursing grand theories, acknowledges all nursing theories past, present, and future, and applies to all nursing domains.</p> <p>CINT applied as research framework by Binner, Ross, and Browner which proved the research-practice gap as individual nurses' knowledge deficit [58].</p>
<p>Meta-Theory of Transcendence Nursing Metatheory</p> <p>Wilkins, L. E. (2002). <i>The Meta-Theory of Transcendence</i>. Retrieved from http://www.cgjungpage.org/learn/articles/analytical-psychology/232-the-meta-theory-of-transcendence</p> <p>Derived from Jung's psychology with the integration of disciplines of nursing and psychology, and is an evolving theory with multidisciplinary relevance.</p>	<p>Derived from Jung's psychology with the integration of disciplines of nursing and psychology, and is an evolving theory with multidisciplinary relevance.</p>
<p>Integral Metatheory Integral Philosophy and Definition of Nursing: Nursing Metatheory</p> <p>Jarrin, O. F. (2006). An integral philosophy and definition of nursing: implications for a Unifying Meta-Theory of Nursing. <i>School of Nursing Scholarly Works</i>. Paper 46.</p> <p>Jarrin, O. F. (2007). An integral philosophy and definition of Nursing. <i>Journal of Integral Theory and Practice</i>, 2(4), 79–101.</p> <p>Jarrin, O. F. (2012). The Integrality of Situated Caring in Nursing and the Environment. <i>Advances in Nursing Science</i>, 35(1), 14–24. doi: 10.1097/ANS.0b013e3182433b89</p>	<p>Jarrin considers integral philosophy and definition of nursing to be a metatheory, which evolved from Wilber's integral theory, which is a metatheory. Jarrin's metatheory evolved into the Integrality of Situated Caring in Nursing and the Environment theory.</p>

Table 2: Summary Table of Selected Interdisciplinary Metatheories with Application to Nursing Meeting Inclusions Search Criteria

Kuyper's Metatheory

Nursing Applying Social Work Metatheory

Kristjanson, L. J., Tamblyn, R., & Kuypers, J. A. (1987). A model to guide development and application of multiple nursing theories. *Journal of Advanced Nursing*, 12(4), 523-529. doi:10.1111/j.1365-2648.1987.tb01362.x

Complex Synergistic System

Interdisciplinary Synergy

Keller, E. F. (1990). Physics and the Emergence of Molecular Biology: A History of Cognitive and Political Synergy. *Journal of the History of Biology*, 23(3), 389-409. ISSN: 0022-5010; E-ISSN: 1573-0387; doi: 10.1007/BF00136376.

Nesse, R. M. (1999). Proximate and evolutionary studies of anxiety, stress, and depression: synergy at the interface. *Neuroscience and Biobehavioral Review*, 23, 895-903. ISSN: 0149-7634; doi: 10.1016/S0149-7634(99)00023-8.

Gintis, H. (2007). A framework for the unification of the behavioral sciences. *Behavioral and Brain Sciences*, 30, 1-61. ISSN: 0140-525X; E-ISSN: 1469-1825; doi: 10.1017/S0140525X07000581.

Interdisciplinary Complexity Science

Lindberg, C., Herzog, A., Merry, M., & Goldstein, J. (1998). Life at the Edge of Chaos. *The Physician Executive*, 24(1), 6-21. ISSN: 0898-2759.

Burns, J. P. (2001). Complexity Science Leadership in Healthcare. *Journal of Nursing Administration*, 31(10), 474-482. ISSN: 0002-0443; PMID: 11676217 Version: 1.

Johnson, J. (2010). The future of the social sciences and humanities in the science of complex systems. *The European Journal of Social Science Research*, 23(2), 115-134. ISSN: 1351-1610; E-ISSN: 1469-8412; doi: 10.1080/13511610.2010.518422.

Leykum, L. K., Lanham, H. J., Pugh, J. A., Parchman, M., Anderson, R. A., Crabtree, B. F., Nutting, P. A., Miller, W. L., Stange, K. C., & McDaniel Jr, R. R. (2014). Manifestations and implications of uncertainty for improving healthcare systems: an analysis of observational and interventional studies grounded in complexity science. *Implementation Science*, 9:165. E-ISSN: 1748-5908; PMID: 25407138 Version: 1 doi: 10.1186/s13012-014-0165-1.

Gates, E. F. (2016). Making sense of the emerging conversation in evaluation about systems thinking and complexity science. *Evaluation and Program Planning*, 59, 62-73. ISSN: 0149-7189; doi: 10.1016/j.evalprogplan.2016.08.004.

Grady, C. M. (2016). Can complexity science inform physician leadership development? *Leadership in Health Services*, 29(3), 251-263. ISSN: 17511879; E-ISSN: 17511887

Interdisciplinary General Systems

Richardson, K. (2004). General Systems Theory: The skeleton of science. *Emergence: Complexity and Organizations* 6(1): 127-140. ISSN: 1521-3250

Kitto, K. (2014). A Contextualised General Systems Theory. *Systems*, 2 (4), 541-565. E-ISSN: 2079-8954; doi: 10.3390/systems2040541.

Rousseau, D. (2015). General Systems Theory: It's Present and Potential. *Systems Research and Behavioral Science*, 32, 522-533. doi: 10.1002/sres.2354.

Applied to Nursing

Davidson, A. W. & Ray, M. A. (1991). Studying the human-environment phenomenon using the science of complexity. *Advances in Nursing Science*, 14(2), 73-87.

Curley, M. A. (1998). Patient-nurse synergy: Optimizing patient's outcomes. *American Journal of Critical Care*, 7(1), 64-72. ISSN: 10623264.

Theoretical Model of Complex Synergistic Systems incorporates Interdisciplinary

Complexity, Synergy, and General Systems.

Constantino, R. E. (2008). Using Complex Synergistic System as a Conceptual Framework in Global Partnership. Symposium presented at Sigma Theta Tau International Honor Society of Nursing. Indianapolis, Indiana.

Constantino, R. E. (2009). Forensic Nursing: Its Global Relevance as a Complex Synergistic System. Symposium presented at Sigma Theta Tau International Honor Society of Nursing. Indianapolis, Indiana.

Burroughs, J. (2013, April 11-13). Understanding Nursing Through a Theoretical Model: Complexity, Synergy, and General Systems. Proceeding of the National Conference on Undergraduate Research (NCUR) 2013, University of Wisconsin, La Crosse, WI.

Constantino, R. E., Burroughs, J. & Hwang, J. H. (2014). ELSI: Ethical, Legal and Sociocultural Issues in Nursing Viewed through a Complex Synergistic System Lens. *Journal of Nursing and Care*, 4(1), 145-145. <http://dx.doi.org/10.4172/2167-1168.1000145>.

Notes:

Complex Synergistic Systems theory was originally developed by Constantino and Crane [50] to be used by forensic nurses and served as a theoretical model consisting of complexity, synergy, and general systems. Not identified as a metatheory, even though presented with many metatheory characteristics.

Integral Theory

Interdisciplinary

Wilber, K. (1997). An integral theory of consciousness. *Journal of Consciousness Studies*, 4(1), 71-92.

Wilber, K. W. (2003) Excerpt A: An Integral Age at the Leading Edge. Ken Wilber Online, Shambhala Publications. Retrieved from <http://wilber.shambhala.com/html/books/kosmos/>

Wilber, K. W. (2003). Excerpt B: The Many Ways We Touch: Three principles Helpful for Any Integrative Approach. Ken Wilber Online, Shambhala Publications. Retrieved from <http://wilber.shambhala.com/html/books/kosmos/>

Wilber, K. W. (2003). Excerpt C: The Ways We are in this Together-Intersubjectivity and Interobjectivity in the Holonic Kosmos. Ken Wilber Online, Shambhala Publications. Retrieved from <http://www.wilber.shambhala.com/html/books/kosmos/excerptC/intro-2.cfm>

Esbjorn-Hargens, S. (2009). An Overview of Integral Theory: An All-Inclusive Framework for the 21st Century. Integral Institute, Resource Paper No. 1, 1-24.

Applied to Nursing

Fiandt, K., Forman, J., Megel, M. E., Pakieser, R. A., & Burge, S. (2003). Integral Nursing: An emerging framework for engaging the evolution of the profession. *Nursing Outlook*, 51(3), 130-137. doi:10.1016/s0029-6554(03)00080-0

Dossey, B. M. (2008). Theory of integral nursing. *ANS. Advances in Nursing Science* 31(1): E52-73. doi: 10.1097/01.ANS.0000311536.11683.0a

Shea, L., & Frisch, N. C. (2014). Application of Integral Theory in Holistic Nursing Practice. *Holistic Nursing Practice*, 28(6), 344-352. doi:10.1097/hnp.0000000000000050

Table 3: Continue..

Shea, L., & Frisch, N. (2016). Wilber's Integral Theory and Dossey's Theory of Integral Nursing. *Journal of Holistic Nursing*, 34(3), 244-252. doi: 10.1177/0898010115608968

Note:

Debate exists that Dorsey considers the theory of integral nursing as a grand nursing theory

Metatheory of Resilience and Resiliency

Interdisciplinary

Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58(3), 307-321. doi:10.1002/jclp.10020

Applied to Nursing

Grafton, E., Gillespie, B., & Henderson, S. (2010). Resilience: The Power Within. *Oncology Nursing Forum*, 37(6), 698-705. doi:10.1188/10.onf.698-705

Simpson, G. & Jones, K. (2012). How important is resilience among family members supporting relatives with traumatic brain injury or spinal cord injury? *Clinical Rehabilitation*, 27(4), 367-377. ISSN: 0269-2155; E-ISSN: 1477-0873; DOI: 10.1177/0269215512457961

Taylor, H. & Reyes, H. (2012). Self-Efficacy and Resilience in Baccalaureate Nursing Students. *International Journal of Nursing Education Scholarship*, 9(1), 1-13. E-ISSN: 1548-923X; PMID: 22499714 Version:1 DOI: 10.1515/1548-923X.2218

Cleary, M., Jackson, D., & Hungerford, C. L. (2014). Mental Health Nursing in Australia: Resilience as Means of Sustaining the Specialty. *Issues in Mental Health Nursing*, 35(1), 33-40. ISSN: 0161-2840; E-ISSN: 1096-4673; doi: 10.3109/01612840.2013.836261.

Rishel, C. J. (2015). The Role of Resilience and Mindful Leadership in Oncology Nursing. *Oncology Nursing Forum*, 42(2), 198-199. ISSN: 0190-535X; DOI: 10.1188/15.ONF.198-199.

Mealer, M., Schmiege, S. J., & Meek, P. (2016). The Connor-Davidson Resilience Scale in Critical Care Nurses: A Psychometric Analysis. *J Nurs Measure Journal of Nursing Measurement*, 24(1), 28-39. doi:10.1891/1061-3749.24.1.28

Realist Metatheory

Interdisciplinary

Bhaskar, R., & Danermark, B. (2006). Metatheory, interdisciplinary, and disability research: A critical realist perspective. *Scandinavian Journal of Disability Research*, 8(4), 278-297. doi:10.1080/15017410600914329

Käpylä, J. & Mikkola, H. (2011). 'Getting things right?': A reconsideration of critical realism as a metatheory for IR. *Journal of International Relations and Development*, 14(4), 401-439. ISSN: 1408-6980; E-ISSN: 1581-1980; doi: 10.1057/jird.2011.13

Eastwood, J. G., Kemp, L. A., & Jalaludin, B. B. (2016). Realist theory construction for a mixed method multilevel study of neighborhood context and postnatal depression. *Springer Plus*, 5(1). doi:10.1186/s40064-016-2729-9

Applied to Nursing

Wainwright, S. P. (1997). A new paradigm for nursing: the potential of realism. *Journal of Advanced Nursing*, 26, 1262-1271. ISSN: 0309-2402 ; E-ISSN: 1365-2648; doi: 10.1046/j.1365-2648.1997.00429.x

Bergin, M., Wells, J. S., & Owen, S. (2010). Relating realist metatheory to issues of gender and mental health. *Journal of Psychiatric and Mental Health Nursing*, 17(5), 442-451. doi:10.1111/j.1365-2010.01559.x

Evolutionary Systems Theory

Interdisciplinary

Badcock, P. B. (2012). Evolutionary systems theory: A unifying meta-theory of psychological science. *Review of General Psychology*, 16(1), 10-23. doi:10.1037/a0026381

Ploeger, A., & Hoort, B. V. (2015). Evolutionary psychology as a metatheory for the social sciences: How to gather interdisciplinary evidence for a psychological adaptation. *Review of General Psychology*, 19(3), 381-392. doi:10.1037/gpr0000052

Table 3: Summary Table of Selected Interdisciplinary Metatheories with Application to Nursing Meeting Inclusions Search Criteria.

Nursing Metatheory	Description	1*	2*	3*	4*	5*	6*	7*	8*	9*	Comments
Humanistic Nursing Theory Paterson, J. G., & Zderad, L. T. (1988).	A conceptual framework in which the nurse-patient relationship is analyzed as a human-to-human event rather than a nurse-to-patient interaction [53].	✓			✓	✓	✓		✓	✓	Metaparadigm surfaced after the original publication of the theory.
Theory of Relational Caring Complexity Ray, M. A., & Turkel, M. C. (2000, 2001).	A metatheory that evokes the complexity of the nursing practice situation today and provides a foundation for new ideas and nursing which explains the origins of both the living and non-living worlds [54-55].	✓	✓	✓	✓	✓	✓		✓	✓	Focus is on nursing practice, complexity science, and bureaucratic caring theory.
Tidal Model Barker, P., & Buchanan-Barker, P. (2001).	A radical, Catholic model of psychiatric nursing practice, focused on the care processes that are fundamental (radical) to nursing practice in mental health and possessing a universality of application (Catholic) that would render it appropriate for any care setting and any mental health population [56].	✓				✓	✓		✓		Authors identified Tidal Model as a metatheory, which has made a significant international contribution to psychiatric and mental health nursing. Identified as a high-level mid-range theory in <i>ansuringtheory</i> textbook [57, p. 231]. Focus specific to psychiatric and mental health nursing. The Tidal Model defined nursing constructs, however developed in Scotland, which uses a different nursing metaparadigm.

Table 4: Continue...

Complexity Integration Nursing Theory Van Sell, S. L., & Kalofissudis, I. A. (2002).	Individual nurse's synthesis and integration of human being nursing theory, social equality nursing theory, the theory of nursing knowledge, and theory of nursing practice. The individual nurse, as a human being, has absolute autonomy over her practice and as such acknowledges all nursing theory, past, present, and future, and uses components from any nursing theory or associated discipline theory to facilitate effective outcomes [40].	✓	✓	✓	✓	✓	✓	✓	✓		CINT applied as research framework by Binner, Ross, and Browner which proved the research-practice gap as individual nurses' knowledge deficit [58]. CINT is the primary metatheory for unifying the profession of nursing.	
Meta-Theory of Transcendence Wilkins, L. E. (2002).	An evolving theory with multidisciplinary relevance which promotes communication between nurse and patient as well as among disciplines [44].	✓	✓					lim		lim	Foundation from Jung psychology. Emphasis on patient-nurse communication. Integrated disciplines of nursing with psychology. Multidisciplinary relevance.	
Integral Philosophy and Definition of Nursing: Nursing Metatheory Jarrin, O. F. (2006, 2007). Dossey, B. M. (2008).	Informed by integral theory, presents the philosophical foundation and application of an integral worldview and process [59].	✓	✓	✓	✓	✓	✓			✓	lim	Metatheory informed by Integral theory, however not derived to nursing, evolving to the Integrality of Situated Caring in Nursing and the Environment [60]. Note: The Theory of Integral Nursing by Barbara Montgomery Dossey in 2008 presented a similar theory based on Wilber's Integral Theory. However, it was judged to be a grand theory instead of a metatheory, which raises the question of whether Jarrin's or Dossey's theories are metatheories or grand theories.
Nursing Aerohemodynamics Metatheory Sredl, D. (1983).	Applies material from every aspect of the flight environment and interrelates the dynamics of physiology with stressors endemic within the flight environment [61].	✓					lim	lim		✓	✓	Comprehensive with a focus on flight nursing. Discusses both a conceptual model and the aerohemodynamics metatheory, however, may in actuality be a practice theory for flight nursing.

Table 4: Analysis of Interpreting Nursing Metatheory According to Nine Questions.