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The Relationship Between Depression and Emerging Adulthood

Theory Generation

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Depression during the transition from late adolescence to young adulthood is a major mental health concern. Developmental theories addressing this transition, also called *emerging adulthood*, are few, and fewer yet are theories addressing mental health or psychopathology during this period. This article establishes the legitimacy of emerging adulthood as a unique developmental period and attempts to generate directions for theory development by merging theories of depression and development at the point of emerging adulthood. This article concludes with a theoretical discussion and application of this process in research and practice. **Key words:** *adolescence*, *adult*, *depression*, *growth and development*, *theory*, *young adult*

DEPRESSION in 18 to 25-year-olds is a growing problem in the United States. Last year the American College Health Association[1] in a survey of over 16,000 students reported that 10% of college students had been diagnosed with depression and that 3.3% and 1.7% of females and males, respectively, were currently receiving therapy for depression. Thirty-eight percent of students reported being so depressed that it was difficult to study. Suicide, an outcome strongly associated with depression, is the third leading cause of death in adolescents and the second leading cause of death in college students.[2] Individuals depressed during adolescence are at an increased risk for suicide attempts and major depressive disorders during adulthood.[3] Despite the scope of depression in this group, little theory about the transition from late adolescence to young adulthood and psychopathology during this stage is available.

A lack of developmental theory discussing the transition from late adolescence to young adulthood is not reflective of the general state of developmental theories. The field of developmental science cuts across many disciplines and is abounding with theory. Those theories that describe specific stages or phases through which the developing individual passes through, sometimes called *staged or differential theories* (eg, Erikson, Freud, Kohlberg, Piaget), often roughly associate specific phases with adolescence and young adulthood, but fail to uniquely identify a phase associated with the transition from late adolescence to young adulthood. As will be discussed below, this current conceptualization may not adequately address the developmental course of American youth.

Not unlike the field of developmental science, the study of depression has generated many theories. As a result of recent historical events in the scientific community, such as the "Decade of the Brain" and the Human Genome Project, many important theoretical and empirical contributions have been made

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to the *biological* understanding of depression. Despite the advances in this area, most studies continue to demonstrate the equal importance of treating both the biology and psychology of depression.[4] Therefore, it is important that any attempt to develop theory around the phenomena of depression in the developmental phase marking the transition from late adolescence to young adulthood take into consideration various theoretical approaches.

Before widespread and systematic changes can be made in depression treatment and prevention for young adults, theory guiding our understanding of the phenomena must be developed. As has been demonstrated in many other populations, theories about prevention, etiology, and treatment are not always transferable across populations, particularly when development is the defining trait of those populations. It is often the practitioner's bane that more careful thought has not been given to the testing and application of theories across diverse populations.

The legs linking the practice-theory-research triangle are multiple and multidimensional. In an applied science or practice discipline such as nursing, theorizing, when performed most effectively, does not take place outside of a context that recognizes practice as a fundamental constituent of the "conceptual workspace." Practice, in turn, when performed at its highest level, does not take place in absence of at least a subconscious theoretical rational. Although theory and practice must be in constant conversation, for widespread and systematic change in practice and education to occur, theory, in conjunction with research, must eventually lead the way. Theory, unlike practice, is not limited by physical or geographic boundaries and can therefore be generalized, disseminated, and interpreted to address unique environments. It is in this sense that the conceptual labor involved in theory development concerning young adults and depression, although often slow and halting, must be done if true change in practice is to be realized.

The purpose of this article is to take a first step in developing theory specific to the occurrence of depression in the late adolescence to young adulthood transition. Consequently, this article will (1) argue the uniqueness of both the transitional phase from late adolescence to young adulthood and the manifestation of depression in this transitional phase; (2) describe past and contemporary developmental theories and depression theories; (3) graphically illustrate an attempt to merge these two areas of theory by placing them in a matrix giving special attention to the developmental phase characterized by the transition from late adolescence to young adulthood; and (4) demonstrate through explication of the theory matrix the manner in which the results of the early phases of theory generation can inform and be informed by practice and be tested in theory-based research.

UNIQUE PHASE, UNIQUE EXPRESSION

For the development of new theory in already well-established areas (developmental theory and depression theory) to be meaningful, justification must be made for its needfulness. In this section 2 points will be argued: (1) the transitional period from late adolescence to young adulthood is sufficiently distinct from late adolescence and young adulthood to be considered a phase of development in its own right; and (2) the expression of depression varies across the lifespan, differing in adolescence from childhood and adulthood. The second argument is largely dependent on the first as the expression of depression can be thought of as being significantly influenced by developmental factors.[5]

The transition from late adolescence to young adulthood as emerging adulthood

Generally identified as the ages of 18 to 25, many milestones mark the transition from adolescence to adulthood in American culture.[6] All youth turning age 18 are granted new legal status as an adult. By age 21, most

youth may legally drink alcohol. Many youth will take their first full-time job during this period and many others will begin some form of postsecondary education. Most will also endeavor to move out from their childhood homes and live at least semi-independently.[7,8] Apart from the many external changes that take place, internal change is often occurring rapidly. It is during this period that decisions about careers and potential partners are made. Families and worldviews are formed. As an adolescent becomes less dependent on the structures associated with their immediate family's home, they begin to form unique identities that may result in separation from former values, traditions, and lifestyles.[6,7] In many ways, this period of transition is characterized by a volume and pace of change and exploration unlike any other period in life.

Arnett[6] recently argued that the time period from late adolescence to young adulthood is sufficiently distinct from both late adolescence and young adulthood to warrant a new conception of development "for the period from the late teens through the twenties, with a focus on ages 18–25."[6(p469)] He called this period *emerging adulthood.* Arnett is not the first, however, to have contributed to a theoretical description of emerging adulthood. Erik Erikson,[9] Daniel Levinson,[10] and Kenneth Keniston,[11] all identified specific periods of development that more or less concerned the time period around emerging adulthood. As Arnett's description of emerging adulthood represents the most recent theorizing in this area, and builds on the work of Erikson, Levinson, and Keniston, it will be reviewed with greater depth here.

Arnett[6] argues that the uniqueness of emerging adulthood can be seen as distinct in 3 ways: demographically, subjectively, and in identity exploration. Demographically, emerging adulthood is most strongly characterized by diversity and instability. This is illustrated best by appreciating the between group and within group differences in residential status and school attendance among adolescents, adults, and those in the transition period in between. According to the US Census Bureau, of adolescents between the ages of 12 and 17, 95% live at home with one or more parent. Of 14 to 15-year-olds and 16 to 17-year-olds, 98% and 94% are enrolled in school, respectively. Of adults older than the age of 30, 75% have married and/or become parents, and 7% of 30 to 34-year-olds and 2% of older than 35-year-olds are in school.[6,12,13] The demographic qualities of those between 18 and 29-year-olds are far more varied than adolescents or adults. In 2001, 58% of 25 to 29-year-olds had completed some college, while 29% had acquired a bachelor's degree and less than 6% had acquired a graduate degree.[14] In 2000, of males 18 to 19, 20 to 24, and 25 to 29 years old, 1.7%, 15.2%, and 44.4% respectively, were married.[15] By age 19, most Americans have left home. Approximately one third will go from high school directly to college semi-dependent on parents, and another 40% will move out and work full time becoming fully independent.[8] As demonstrated here, emerging adulthood is unique for the diversity of its demographics.

Besides demographic distinction, Arnett[6] describes emerging adulthood as a period of developmental ambiguity and semantic subjectivity. We typically think of persons as moving from "adolescence" to "adulthood," not specifying any culturally recognized intermediary period. The lack of nomenclature is reflected in the attitudes of 519 18 to 25-year-olds who most often answered "yes and no" to the question, "Do you feel you have reached adulthood?".[16] It seems that 18 to 25-year-olds are not sure where to classify themselves developmentally. They are beyond adolescents in that they are usually at least semi-independent and making many decisions for themselves but they do not yet feel they have acquired all the characteristics of adulthood. *Self-sufficiency* is the quality that most characterizes adulthood for many 18 to 25-year-olds.[17,18] Emerging adulthood uniquely describes a period of transition in which many individuals are "somewhere in between" adolescence and adulthood. Because this period can last up to 10 years, it is important that it be recognized as unique

and investigated as a distinct developmental period.

Emerging adulthood is also made distinct by the identity exploration in the areas of love, work, and worldview that takes place in the transition from late adolescence to young adulthood.[6] In terms of both love and work, individuals in this period are exploring and experiencing a variety of opportunities as they seek to find matches that will endure into adulthood. Experiences in the area of love and work may also represent a last chance for experimentation prior to bearing the responsibilities of the adult world. Worldviews are reformed during this period as well. Frequently, the beliefs, values, and religious views brought out of adolescence are unchallenged and reflect those of parents or other role models. Exposure to multiple worldviews in settings such as college, may lead to the rejection, reformulation, or affirmation of those frameworks that have characterized the home life of the emerging adult. Emerging adulthood, for its distinctive demographics, developmental subjectivity, and identity exploration, represents a developmental phase that is unique and differentiated from both adolescence and adulthood.

Depression across the lifespan

As has been seen, the period of transition from late adolescence to young adulthood is developmentally distinct from adolescence and adulthood. As such, the experience of depression varies across the lifespan in ways that are closely connected to development.[5] Although it is difficult to find research that has specifically investigated the experience of depression in emerging adulthood, it can be shown that depression is uniquely expressed in childhood, adolescence, and adulthood. By considering the differences between child, adolescent, and adult depression, important patterns may be noted that are instructive for theorizing about depression in emerging adults. If it is agreed that emerging adulthood represents a unique developmental phase, then it may be reasoned that depression will be expressed uniquely in this developmental phase, just as it is in childhood, adolescence, and adulthood. This argument will be explored more fully after a discussion of what is currently known about the differences between child, adolescent, and adult depression.

Table 1 summarizes differences seen in depression across the lifespan. Several observations can be made about the information presented here. First, it should be noted that while the symptomatic expression of depression may vary across the lifespan, the core symptoms are believed to be the same.[28] The criteria found in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM-IV)[27] for depression are the same for children and adolescents as they are for adults. Variation occurs in the actual expression of symptoms such as sadness or difficulty concentrating. These variations can often be mediated by developmental factors. For example, difficulty concentrating may present as school difficulties in the child or adolescent. Sadness, often difficult to express verbally for children, may present as irritability or anger and hostility. A second observation is the change in risk related to gender across the lifespan. Depression in childhood is seen equally in males and females. By midadolescence, however, the ratio has changed and females are at a significantly greater risk of developing depression. This risk factor continues into adulthood. A final observation that can be made is the change in prevalence rates across developmental periods. The 1-month prevalence for depression has been found to be highest for those aged 15 to 24 years than found at any other time in life.[22]

Many questions arise out of even a cursory comparison of depression across developmental phases such as this. For example, what accounts for the change in gender distribution between childhood and adolescence that persists into adulthood? Is the variance seen across different developmental phases a function of underlying etiology, sociocultural factors, or developmental factors? What causes

Table 1. Comparison of depression across the lifespan*

Childhood	Adolescence	Adulthood
Prevalence (%)		
1-year, depression (2.5)[19]	One-month MD (5.8)[20] Lifetime, MD (15.3)[20] Majority report recurrence[20] Onset begins to increase in the early teens and continues to mid-20s[21]	One-month MD (4.9)[22] 1-year, MD episode (6.5)[23] 1-year, unipolar MD 5.3)[23]
Risk		
Family history of depression more likely than in adolescent and adult onset[24]	Prior depressive symptoms[25] Females at significantly greater risk[25]	Females at significantly greater risk[24] Previous history of depression[24]
Male and female at equal risk[25]		
Development specific symptoms		
Frequent sadness, tearfulness, or crying, feelings of hopelessness, withdrawal from friends and activities, lack of enthusiasm or motivation, decreased energy level, major changes in eating or sleeping habits, increased irritability, agitation, anger or hostility, frequent physical, complaints such as headaches and stomachaches, indecision or inability to concentrate, feelings of worthlessness or excessive guilt, extreme sensitivity to rejection or failure, pattern of dark images in drawings or paintings, play that involves excessive aggression directed toward oneself or others, or involves persistently sad themes, recurring thoughts or talk of death, suicide, or self-destructive behavior[26]	Poor performance in school, withdrawal from friends and activities, sadness and hopelessness, lack of enthusiasm, energy or motivation, anger and rage, overreaction to criticism, feelings of being unable to satisfy ideals, poor self-esteem or guilt, indecision, lack of concentration or forgetfulness, restlessness and agitation, changes in eating or sleeping patterns, substance abuse problems with authority, suicidal thoughts or actions[2]	See DSM-IV diagnostic criteria[27]

*MD indicates major depression.

the increased prevalence rates around the period of emerging adulthood? Answers to questions about the relationship between development and depression are complex and difficult to ascertain. One approach to answering these questions is to consider, from a theoretical viewpoint, the linkages that exist between developmental and depression theory.

The above paragraphs have attempted to establish the legitimacy of emerging adulthood by highlighting its distinctiveness from other developmental phases. A second purpose has been to illustrate the changing face of depression across the lifespan. A foundation has now been laid for a discussion of the occurrence and expression of depression in the developmentally unique period of

emerging adulthood. The following section presents a review of several developmental and depression theories and then attempts to merge them using a theoretical/conceptual matrix. Special focus is given to the period surrounding emerging adulthood in the matrix.

CROSSING DEVELOPMENTAL THEORY AND DEPRESSION THEORY AT EMERGING ADULTHOOD

Theories of psychopathology specific to emerging adulthood are not available in the current literature. While evidence is growing that the transition from late adolescence to young adulthood is developmentally unique to adolescence and adulthood, and that depression may take on a unique expression during this period, the theoretical work needed to organize and explain knowledge in this area is lacking. A possible first step in addressing this need is to consider the merging of theories of development and depression. In this section, developmental theory will be discussed broadly, as an introduction to the current range of theory, and then specifically, in the description of several developmental theories. Following this, several depression theories will be described. Finally, an attempt to develop a conceptual/theoretical matrix merging theories of depression and development will be made.

Theories of development

Lerner[29] divides developmental theory into 3 broad and somewhat distinct philosophical categories: mechanistic, predetermined epigenesis, and developmental systems. Mechanistic theories of development presuppose (1) the continuity of certain determinative laws or principles governing behavior across the life span; (2) that complex behavior can be reduced to common elements; (3) the common elements of behavior are controlled by forces external to or placed into (by inheritance) the person; and (4) the person is essentially passive and reactive. Therefore, developmental theorists utilizing mechanistic theories must identify stimulus-response mechanisms to explain behavior. Fundamentally, efficient antecedents (environment or genes) are viewed as determinative throughout the course of a lifetime. Because only one set of principles and a static set of elements can be in force as the person develops, mechanistic views are forced to align with either nature (genes) or nurture (environment) determinative arguments, but not both. Examples of this theoretical viewpoint include the works of Skinner,[30] Bijou,[31] and more recently Rowe.[32]

As opposed to mechanistic developmental theories, organismic developmental theories presuppose epigenesis, or the view that ontogeny is marked by qualitative discontinuity and irreducible complexity. As opposed to mechanistic views, which presuppose that ontogeny is characterized by a long succession of stimuli and responses that can be ultimately reduced to common environmental and genetic agents, the organismic model presupposes that behavior cannot be reduced to previous qualitative states through the reduction of genetic or environmental factors. For example, in the case of comparing the behavior of a 5-year-old and 15-year-old, the mechanistic view would interpret differences as mere quantitative fluctuations of stimulus-response patterns. The 5-year-old's behavior is composed of the same basic stimulus-response elements as the 15-year-old and is governed by the same laws and principles. The organismic view, however, would reason that behavior differences are the manifestation of essential qualitative differences. This means the 5-year-old's behavior is distinct and different from the 15-year-old's, neither composed of the same elements nor governed by the same laws and principles. In this view, the 15-year-old's behavior cannot be reduced to elements that are common with the 5-year-old's behavior; the development of behavior is qualitatively discontinuous.

Organismic theory can be further divided into 2 schools of thought, predetermined epigenesis and developmental systems. The main

difference between these 2 organismic developmental approaches is their treatment of the relationship between the person and their context. Predetermined epigenesis, a purist view, states that ontogeny occurs as the result of predetermined forces internal to the person. Context may influence ontogeny, but its effects are secondary to the intra-person goal-directed process of development. Lerner[29] states, "From this perspective, the human is inherently active; that is, it is the human who provides a source of its behaviors in the world, rather than the world providing the source of the human's behaviors."[29(p61)] In this sense, pure organicism is very similar to the mechanistic view that ontogeny is singularly driven by nature in this case, versus nature *and* nurture. Table 2 summarizes the differences between mechanistic and organismic approaches to development.

More persuasive and contemporary than the predetermined epigenetic view is the developmental systems approach. The developmental systems view is based on *probabilistic* epigenesis. Probabilistic epigenesis attempts to address the singularity of the purist position by fully embracing a "systems" approach to ontogeny within an organismic framework. In this view, no split is made between nature and nurture; the person-environment relationship is expressed as a complete fusion of systemic elements integral to the environment-person (nature-nurture) context.[29] The person and context are continuously and dynamically acting upon each other. Importantly, besides probabilistic epigenesis, developmental systems incorporate a lifespan approach that attempts to account for the change that will occur across time in both person and context and the resulting synergistic influence on biopsychosocial behavior. In sum, mechanistic and predetermined epigenetic views attempt to account for behavior by environmental or intrinsic factors, respectively, while the developmental systems view attempts to merge the effects of environmental and intrinsic factors as determinants of behavior. With a foundational understanding of developmental theory in place, 3 exemplar theories, representing mechanistic, developmental systems, and predetermined epigenetic views, will be briefly described.

Mechanistic developmental theory – behavioral genetics

The field of behavioral genetics, and its sister disciplines, such as sociobiology, is representative of a mechanistic orientation to development. Behavioral geneticists entertain the possibility that human behavior and development can be explained in terms of variance partitioned to either genetic causes or environmental causes. There is the tendency in behavioral genetics, however, to promote the notion that the interaction between a person's genes and their environment is unimportant.[29] Taking this view a step further, sociobiologists contend that *all* human behavior can be explained by the principles governing genetic function.[29,33] As such,

Table 2. Mechanistic and organismic views of development*

Mechanistic	Organismic
• Natural-science (materialist)	• Epigenetic
• Reductionistic	• Antireductionistic
• Quantitative	• Qualitative
• Continuity (of developmental phases)	• Discontinuity (of developmental phases)
• Behavior is the result of additive stimulus-response interactions governed by stable principles	• Behavior is the result of multiplicative interaction

*From Lerner.[29]

development is viewed as coming from a single source – nature. It unfolds continuously and can be reduced to elemental genetic factors.

Developmental systems theory – developmental contextualism

Lerner's theory of Developmental Contextualism is a complex model that is heavily influenced by the probabilistic epigenetic perspective of humans, the lifespan perspective of development, and the role of environment as context. As discussed above, developmental systems emphasize the role of the nature-nurture synthesis by formulating the origin of behavior as a dynamic interaction resulting from a bidirectional exchange between the individual and his/her environment. For example, a child might be considered in regard to his/her parent. Here the child represents the individual of interest and the parent is part of the environment (although environment could include any element of the social-physical ecology of the child). The child is influenced by his/her parents' actions. As the child responds to the parent, the parent is influenced by the child's actions. Both the child and the parent may alter their behavior in future interactions based upon the current interaction. In this way, the child has not only been influenced by his/her environment, but has influenced his/her environment. As the child grows and matures through time, the unique history of his/her experiences interacting with his/her own unique composition will combine to make him/her increasingly unique over the course of a lifetime of development. Although oversimplified for this discussion, the example of the child-parent interaction presents a submodel of what is a multidimensional model attempting to account for the ecological complexity of person-environment interactions across time. In sum then, "the integration of (a) the actions of people in and on their world, and (b) the actions of the world on people, shape the quality of human behavioral and psychological functioning."[29(p14)]

Predetermined epigenetic developmental theory – Erikson's stage theory of psychosocial development

Stage theories are organismic in nature and vary in degrees as to their view of the nature-nurture interaction. Erikson's stage theory represents a purist view of organicism, that is, the individual is endowed with an inner map for development that is largely uninfluenced by the environment. Specifically, Erikson believed that the "plan" for individual development is present at birth but that different components manifest at different times. When all components have fully "ascended," the individual can be considered to represent a functioning whole.[9,29] The process involved in this path of development involves operational tensions generated by conflicts between culturally mediated social demands and the ego. Psychosocial development occurs when the ego is confronted by a societal demand that it is unable to meet. The changing demands of society generate emotional crises. It is through these emotional crises that the ego either successfully develops and progresses, or does not successfully develop and experiences negative emotional consequences. If an individual did not progress through a stage according to the socially constructed timetable, he or she would never develop the "quality" associated with that stage, and future movement through the developmental process would be negatively affected. Erikson theorized that 8 stages of psychosocial development existed. They include the oral-sensory stage, anal-musculature stage, genital-locomotor stage, latency, puberty and adolescence, young adulthood, adulthood, and maturity. Each stage is associated with an ego capability that must be developed through an emotional crisis.[9] Erikson characterized each emotional crisis in differential terms. Of interest here are the crises associated with adolescence and young adulthood, identity versus role confusion and intimacy versus isolation.

Developmental theories are complex and represent a variety of philosophical positions.

Developmental systems theory represents the general approach of much of the developmental theory being used today such as lifespan and lifecourse theories. Before attempting to merge the developmental theories described here with depression theory, several specific examples of depression theory will be discussed.

Theories of depression

Individual psychology

The Individual Psychology theory of depression can be traced back to the work of Alfred Adler (1870–1937). Several principles are foundational in his view of depression: (1) the person is an indivisible whole, a fully integrated mind and body; (2) humans are by nature communal and exist as one among many; (3) living successfully in community with others is the hallmark of mental health; (4) maladaptive behavior is represented by a failure to enjoin others in productive activity; (5) maladaptive behavior often occurs as a result of an inferiority complex; (6) inferiority complexes occur when children are unable to mature developmentally and meet the demands of "growing up;" and (7) this sense of inadequacy or inferiority can dominate behavior and put "distance" between the individual and the challenges of life.[34] Depression grows out of a persistent alteration in perception of the individual who has developed an inferiority complex because of failure to mature into successful roles in community. This subjective perception, or apperception, results in a distinctive pattern of looking at life. A pattern of inferiority can lead to maladaptive beliefs and behaviors characterized by avoidance of normal life challenges, and unproductive compensatory coping, such as self-deceptions or "fictions." The degree to which a "fiction" becomes fixated in an individual's mind will inversely determine their level of effective functioning.[34]

Cognitive theory

Although many cognitive theories of depression exist, they make similar assumptions about the causes and nature of depression. Cognitive theories are representative of mediational models that assume that cognitive factors, such as maladaptive beliefs, attributional styles, and problem-solving deficits, are associated with, if not causative of, depression.[35] As such, cognitive theories emphasize the role of cognitive activity in the onset, maintenance, and alleviation of depression. The following assumptions of cognitive models have been identified: (1) cognitive activity affects behavior; (2) cognitive behavior may be monitored and changed; (3) behavioral and emotional change may be affected through cognitive change; (4) cognitive processes are ongoing, active, and adaptive; (5) affective, behavioral, and cognitive factors interact in a reciprocal manner over time; and (6) there is a relationship between cognitive contents, cognitive processes, and the occurrence of specific symptoms.[36] Essentially, cognitive therapies take a systems approach to an individual's beliefs about the world and the perceived meaning it has. The aim is to alter an individual's belief and meaning system in a manner that alleviates depression and promotes higher functioning.

Biological theory

The biological theory posits that depression is a medical illness with a biological origin. Although most proponents will agree that biological and environmental factors interact to produce a clinical scenario, the theoretical constructs are firmly grounded in neurochemical, genetic, structural-anatomical, and neurohormonal explanatory models.[37] The model best known concerns a malfunctioning of monoamine (norepinephrine, serotonin, and dopamine) neurotransmitter systems. Current therapy consistent with this view is aimed at symptom amelioration through psychopharmacology.

Depression and development, a theoretical matrix

Table 3 graphically depicts a conceptual merging of theories of development and

Table 3. Depression × development theoretical matrix

	Theories of Development		
		Organismic	
Depression Theories	**Mechanistic Behavioral Genetics**	**Erikson's Stage Theory**	**Developmental Contextualism**
Individual psychology	The sense of inferiority that Adler proposed might develop because of genetically controlled factors that influence an individual's "success" in life. For example, the emerging adult may have a homely appearance. Throughout childhood, and even into emerging adulthood, this physical factor may have inhibited the individual's ability to successfully interact with their community resulting in an inferiority complex. To compensate, the individual develops an inaccurate view of others that is derogatory, further disabling their ability to participate in community. As a result they are estranged from community and ultimately depressed.	Emerging adults are establishing identities and experimenting with intimacy. Failure at either one of these attempts to manage societal demands and internal changes may result in feelings of inferiority secondary to not accomplishing maturational tasks. As a result, the emerging adult may begin to place distance between him or herself and the challenges they are experiencing (deciding on a career, finishing school, managing budgetary resources, establishing and maintaining intimacy). Maladaptive beliefs, or "fictions," may be employed as coping mechanisms, leading to depression.	The failure of an individual to successfully function in community across the course of time will lead to an inferiority complex that will shape their environment or community. This community will in turn, shape the individual. Because the individual is always actively shaping, or constructing, their environment many "fictions" may develop, increasingly inhibiting the individual's ability to interact with the environment on a reality basis. By the time an individual reaches emerging adulthood, established perceptual patterns might have emerged that are continually shaping their environment. Conversely, as the emerging adult is frequently encountering new environments, he or she may experience the opportunity to move away from old patterns and experience success in community life.

Cognitive theory	There is little known about the mechanisms explaining the relationship between genes and behavior. Cognitive theories of depression may help explain the apparent evidence for the genetic transmission of depression by accounting for the heritability of cognitive mediators such as negative attributional style, dependent personality, or depressogenic inferential style. Indeed, if such vulnerabilities could be demonstrated to originate with internal factors (eg, genes) it may help to explain the increase in depression throughout adolescence. As the adolescent ages, he/she becomes increasingly capable of abstract thought and apperception. Therefore, they further expose their own cognitive belief and meaning systems to the effects of the vulnerabilities mentioned above. Some adolescents will inevitably fail to cope with these cognitive vulnerabilities and will experience depression as adults. Most, however, will adapt their meaning and belief systems to cope with the vulnerabilities.	Cognitive theory states that depression is mediated by cognitive factors broadly referred to as belief or meaning systems. As an individual reaches emerging adulthood, he or she will be faced with societal demands as well as individual changes. Responses to these emotional crises will be mediated by the emerging adult's beliefs about establishing an identity, or the meaning of becoming intimate. For example, an emerging adult may view himself or herself as a "nobody" because of failing to form an identity in adolescence. It is likely that this view of self will spell out certain problems in experiencing intimacy and may lead to isolation and depression. Establishing an identity is intimately linked with one's beliefs about themselves and the meaning they assign to their own experiences in life. An emerging adult who is depressed may be experiencing role confusion/diffusion. An alteration in their beliefs about themselves may allow them to progress to the next stage of development before it passes.	A cognitive theory of depression situated in a developmental contextualism perspective allows for the understanding of cognitive vulnerabilities as being both products and causes of both nature and nurture. The development of depressogenic beliefs and attributions becomes not only a function of the interaction of the factors of the mind but of the person-context environment. For the depressed emerging adult, the focus of recovery may involve attempting to shape one's environment with the knowledge that this will in turn shape their cognitions. The resulting focus may tend less toward concentrating on what is happening in the mind and more on the interaction between mind and context (in all its multidimensionality). The emerging adult who has a needy personality and drives peers away is unable to garner social support and is at risk for depression. A key understanding for the individual to grasp would be the bidirectional effects of how they are thinking and internal and external contexts.

(*continues*)

Table 3. (*Continued*)

Depression Theories	Theories of Development		
	Mechanistic	Organismic	
	Behavioral Genetics	Erikson's Stage Theory	Developmental Contextualism
Biological theory	Since development is governed by one set of principles that persists over the course of life and varies only in quantity of stimulus-response interaction, depression in emerging adulthood, at least in part, can be understood as an internal response that is ultimately governed by one's genetics. Efforts at understanding and altering depression should be aimed at understanding genes as they affect biochemistry, neurohormonal systems, and brain structure, during the transition from late adolescence to young adulthood. The increase in female depression in this model may represent no more than consistent genetic variation across two groups. Although environment is of interest, it is unclear *how* or *if* it interacts with a person's genes and is secondary in focus.	Erikson believed that the "blue print" (presumably genetic?) for development was present in every person from birth. It is from this blueprint that different stages arise causing emotional crises—identity/role confusion and intimacy/isolation—during the emerging adulthood period. Might this suggest some type of emotional aging produced just as surely as physical aging? If so, parallels can be drawn. Persons who fail to care for their physical bodies often reap what they sow in later years. Perhaps too little attention to psychosocial development can result in similar outcomes. As such, the emerging adult who does not care for their psychosocial health and development, establishing identity and intimacy, may be out of step with a concurrent neurochemical or hormonal event that is occurring in the physical body. Although earlier, events such as puberty offer credence.	Behavior is shaped by biology, environment, and the person-context interaction. Depression, *only* in part, may be caused by the interaction that occurs between genes and the environment across time. The direction of influence, however, is bidirectional. That is, the environment will shape the genetic response just as genes will shape the environment. In emerging adulthood then, the focus is on the interaction between the characteristic social and physical ecological elements, such as the uncertainty produced by multiple decisions (partner, career, worldview, etc), and an individual's biology. How does genetic makeup affect an individual's ability to cope with transition across time? How does the stability of an interpersonal love commitment effect neurochemicals and hormones?

depression theories. Special emphasis is given to the emerging adulthood developmental period. In the boxes representing the intersection of 2 theories, such as Developmental Contextualism and Biological Theory, an attempt is made to briefly describe a resulting theory of depression in emerging adulthood. The purpose of this method is to generate possible starting points in the construction of mental health theory specific to emerging adulthood. It is unlikely that any one intersection will depict a satisfactory theory of depression, however, it is likely that new viewpoints not previously considered may emerge and warrant further discussion and/or investigation. As attempts have been made to choose a somewhat diverse assortment of depression and development theories, the matrix also provides an overview of the range of theoretical ideas available to this area of study.

Although specific observations can be found in the table, several broad, nonspecific observations can be made here as well. First, one benefit of this approach is that it provides stimulus for hypothesis development when considering depression in emerging adulthood. Considering depression as a development-specific phenomenon necessitates a broader consideration of what is undoubtedly a complex and multifactorial model. It not only presents multiple explanations of causation but may also help to explain the current "picture" of depression in emerging adulthood. Several of the intersections above hint at possible explanations of gender differences and increases in prevalence in late adolescence and young adulthood in depression. This type of inductive/deductive reasoning may also be helpful in answering other questions about depression. Second, understanding how different theories interact at the construct and concept level will give direction for the simultaneous testing of multiple theories. A developmental systems approach necessitates a growing capacity to understand and test the intersection of multiple theories across time. As research design and analysis techniques become more advanced and refined, the skill of combining theories will become increasingly important.

Third, as the speed of data production and analysis continues to increase, the need for theory to organize and understand information will grow in importance. Undoubtedly, theoretically modeling data will require the merging and transforming of existing theories. Fourth, an exercise such as the one above draws out commonalities and differences that may not have otherwise been noted. For example, a casual consideration of Table 3 suggests that the scientific community may be moving in disparate directions as it seeks to understand and explain human behavior. Theories of development, across time, have become increasingly multivariate, inclusive, and complex, while the newest theories of depression are more focused on univariate (genes, chemicals, structure and anatomy) and exclusive explanations. While this observation is neither good nor bad in and of itself, it is important to be aware of these trends so that communication across disciplines can happen as effectively as possible.

Several limitations of the process represented in Table 3 should also be noted. First, the theories represented are far more complex and developed than depicted here. A thorough understanding of how two or more theories might interact would require a level of analysis superior to what has been done. Second, while the merging of theories might be beneficial at the theoretical level, it can only be thought of as preliminary work to actual knowledge generation. As new hypotheses are developed, they will need to be tested. Third, a certain stance of conscious ignorance must be taken toward the assumptions of some theories. For example, developmental contextualism and biological theory have little common ground and at the philosophical level may be found to be incompatible. The information generated by these models, however, can be cautiously combined to further direct theory and practice and test the assumptions on which current models are built. An example of this is provided in the following section as several "theoretical

intersection," will be more closely considered by exploring their application in the areas of research and practice.

EXPLICATION AND APPLICATION

Leonardo da Vinci wrote, "He who loves practice without theory is like the sailor who boards ship without a rudder and compass and never knows where he may be cast." da Vinci captures succinctly the import of theory in practice. As nursing grows and develops, it must hold high for itself the bar of disciplinary rigor, meaning that an understanding of the importance of theory-guided practice must become evermore the norm in educational programs and practice settings. To accomplish this, theory must be developed and tested on an ongoing basis, particularly in those areas that are "theory-poor." Depression in emerging adulthood is one such area.

While many assume that the process of theory development and testing is somehow irrelevant to practice until the "results are in," much benefit can be gained from interaction between practitioners and theorists throughout the entire development and testing process. By considering in greater detail several of the intersections in the theory-matrix, some of the benefits can be demonstrated here.

First, both practitioners and theorists must recognize that all practice is, to varying degrees, theoretical, and as such, the contemplation of competing or new theories prods one on to the recognition and articulation of their own working theories. For example, at the intersection of individual psychology and behavioral genetics, an essentially psychological view is blended with a biological view of depression in emerging adulthood. In this case, the results lead to not only an appreciation of psychological symptoms and psychological distal causes of depression, but genetic proximal causes that interact with a value system imbedded in a society. Or more specifically, a depression-inducing inferiority complex developed in developmental phases prior to young adulthood may arise out of a genetic predisposition to a particular morphology that is not highly valued in American society.

Many practitioners in considering the hypotheses related to this particular theoretical intersection may react by spelling out what it is they believe contributes to depression at emerging adulthood based on their own experiences. It is in this process that the practitioner may instantaneously synthesize years of experience into several sentences of theoretical expression about young adults experiencing depression. They may also be intrigued by how a plausible link between psychology and biology was quickly formed by the intersecting of developmental and depression theories. This process can be invaluable for the practitioner in recognizing that they themselves have developed an informal theoretical model that guides their decision making from day to day. It may also point the practitioner to further consideration of theoretical explanations of "problem areas" in their area of practice, such as the mechanistic link between genetics and psychopathology. Upon this recognition, one might be inspired to further explore other explanatory theories in their area of practice.

Secondly, multidisciplinary approaches to patient care, by their very nature, stand to benefit from the ability of their constituents to actively analyze and synthesize diverse theoretical approaches. For example, at the intersection of biological theory and developmental contextualism, several predominant approaches are brought together. Key to understanding this particular confluence is understanding the bidirectional effects of biology and ecological context across time. A discussion concerning the treatment of depression in a young adult among members of a multidisciplinary team may take place between a social worker, a case manager, a psychiatrist, a nurse, an occupational therapist, and a psychologist. Considering the effects of a possible neurochemical imbalance over

a period of time in the young adult's psychosocial, emotional, circumstantial, and historical context would yield some portion of plausible explanation for most disciplines involved. As the client's social history is considered against the backdrop of a possible longstanding chemical imbalance, the current crisis with the client's significant other may come into sharper focus. Theoretical models and processes that allow for and encourage the synthesis of multiple theories will potentially stimulate practitioners to the consideration of various explanations from inside and outside of their disciplines. It may also engender collegiality by creating an opportunity for multiple members of the team to put forth their theoretical perspectives. Ultimately, this open-minded approach enhances the quality of patient care by actively encouraging thoughtful and holistic approaches to client care.

Thirdly, the practitioner, when exposed to the theorists efforts at theory building, may have the opportunity to inform, challenge, or addend the theorist's speculations. Just as it is the theoreticians and researchers who must ultimately bring widespread change into nursing, it is the practitioners who will put theory to the ultimate test. At the intersection of cognitive theory and Erikson's stage theory, the risk for depression is based on the emerging adult's failure to progress successfully through some stage of development, such as identity versus role confusion. Failure to progress, according to Erikson, represents an irreparable loss.[29] From the perspective of cognitive therapy a major goal would be to stimulate fundamental change in the client's meaning and belief systems that would encourage the successful passage through the emotional crisis that allows for growth toward identity and away from role confusion. It may be the practitioner's experience, however, that emerging adults very rarely respond to approaches based on the principles of cognitive theory. The practitioner may contend that this population responds more quickly to pharmacotherapeutics given that the failure to establish identity, in Erikson's model, may signal a lifelong struggle and an ongoing need for antidepressants. The theorist is then challenged to further explore, examine, and possibly revise their theoretic constructions. It is in this way that the theorist and the practitioner themselves may form a theoretical matrix as each shares their understanding and beliefs about a particular phenomenon. Just as in the matrix presented here, new perspectives and new possibilities are opened up to both the practitioner and the theorist, fostering progress for both.

Practice, research, and theory can all be influenced at every stage of development through mutual exposure. Depression in emerging adulthood represents a field of inquiry that is theory-poor and can benefit from the discussion of theories from related fields by individuals in both the theory work and practice of their disciplines. The relationship between theory and practice is interdependent and will prove most effective and efficient when it functions as so.

CONCLUSION

The study of depression in emerging adults demands a view of science that attempts to account for the complexity that is found in reality. By considering the merging of theoretical models of development and depression, new directions in theory and research can be generated. These hybrid models, through further research and theorizing, can be developed to reflect multiple theoretical perspectives and the experience of the practitioner. Ultimately, these efforts will lead to the development of new knowledge that will move our science and practice forward. As mentioned earlier, the dizzying rate at which information is produced and the resulting highly sophisticated picture of health demands a strong commitment on the part of the researcher and the practitioner to the application of theory. Without this commitment, the information generated will, at best, be impotent, and, at worst, be misinterpreted and misused.

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