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# Critical Thinking in Applied Psychology: Toward an Edifying View of Critical Thinking in Applied Psychology

STEVE YANCHAR, AARON JACKSON, KRISTIN HANSEN, AND JAMIE HANSEN

*A gospel-centered approach to critical thinking that can facilitate psychotherapeutic work and be edifying to faithful counselors and clients would be very beneficial. This article examines what a defensible approach to gospel-centered critical thinking about psychotherapy would look like, how it would differ from secular scholarly disciplines and practices, and whether it should differ at all. Because all critical thinking strategies are framed by a theoretical background of assumptions and values and because not all assumptions and values are true or useful, approaches to critical thinking must be carefully examined by those who would employ them. Latter-day Saint counselors and psychotherapists should evaluate the kinds of critical thinking they use in their practice and consider supporting an approach that is based on the truths of the restored gospel.*

At a professional conference attended by one of the authors of this article, a BYU faculty member made a presentation regarding critical thinking. Afterward, one attendee expressed her surprise that someone from BYU would openly discuss critical thinking in a scholarly forum. Her prior experience in a graduate program at a state university in Utah had evidently led her to believe that faith in the doctrine and message of The Church of Jesus Christ of Latter-day Saints (LDS) could only be taken seriously by those with little motivation to think critically about the nature of human existence and the surrounding world.

This conference goer's view of LDS church members is thought provoking and challenging. It is conceivable that many LDS church members fail to think deeply and critically about important issues in their personal, profes-

sional, or spiritual lives, even though leaders (e.g., Brown, 1996; Faust, 1997; Hafen, 1996; Schultz, 2002) and scholars (e.g., Nibley, 1970; Warner, 1971) in the church have explicitly warned against such a stance. Or perhaps this

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conference-goer had mistakenly assumed that it is impossible to exercise adequate critical and rational thought as a religious person. If the latter is the case, then this person's statement would seem to represent a false dichotomy familiar to many and conceptualized by Warner (1971) as "unthinking belief" versus "faithless reason" (p. 14).

However one attempts to explain this conference-goer's impression, it is likely that most LDS church members would reject the idea that because of their faith they do not support and are unlikely to engage in deep thought, serious questioning, and critical reflection,<sup>1</sup> and many would have reservations about the traditional faith-reason antinomy that underlies this notion. Surely there must be some alternative position that better captures the activities of questioning and critical thinking among faithful LDS church members, particularly psychotherapists. Although the precise nature of that position cannot be legislated in specific and dogmatic terms, discussion of what it might generally entail seems useful. If some conception of critical thinking can facilitate psychotherapeutic work and be edifying to faithful counselors and clients, it would be an important ally indeed.

What would a defensible and edifying approach to critical thinking about psychotherapy look like? Would it differ from what is commonly accepted in secular scholarly disciplines and practice? Should it? We will respond to these questions by examining critical thinking as it is conceptualized in the contemporary scholarly literatures and by explaining why our answer to the second question is both yes and no. More specifically, we will briefly review the main currents of thought regarding critical thinking theory and practice, discuss some of their limitations, and suggest a more suitable starting point for a defensible and edifying view of critical thinking for counselors and psychotherapists.

#### TRADITIONAL APPROACHES TO CRITICAL THINKING

Critical thinking in the Western tradition can be traced to the philosophical dialogues of antiquity and seen in subsequent eras of Western intellectual history, as manifest in the works of formative thinkers such as Aristotle, St. Augustine, St. Thomas Aquinas, Francis Bacon, and Erasmus; in British empiricists such as Hobbes, Locke, and Hume; in continental rationalists such as Descartes and Kant; and in eighteenth- and nineteenth-century reactions to traditional philoso-

phies, such as those offered by Vico, Herder, Marx, Kierkegaard, and James.<sup>2</sup> This outpouring of scholarly endeavor throughout the ages—which often entailed vigorous attacks and defenses of various positions on theology, ethics, reality, knowledge, human nature, governance, and education—provided a rich tradition of critical analysis, even if the term *critical thinking* was not yet in wide use and no formal "critical thinking across the curriculum" programs were established.

The twentieth century saw not only continued intellectual debate but also rising concern with formalized or institutional critical thinking practices, particularly in pragmatist thinkers (e.g., Bode, 1921; Dewey, 1910, 1916), who emphasized reflective, logical thought developed through problem solving in real-world contexts, and in the work of analytic philosophers (e.g., Black, 1946; Copi, 1953), who emphasized formal logic and scientific reasoning in the evaluation of arguments. It was not until the last several decades of the twentieth century, however, that critical thinking as a formal educational objective received its fullest expression and was given its greatest impetus by theorists and educators associated with the informal logic movement.<sup>3</sup> For these theorists, the most defensible and serviceable form of critical thinking would not be principally concerned with formal logic but with "critical analysis of arguments as they occur in natural language in the real marketplace of persuasion on controversial issues in politics, law, science, and all aspects of daily life" (Walton, 1989, p. ix). According to informal logic advocates, critical thinking should emphasize concerns such as adequacy of definitions, reduction of ambiguity, examination of assumptions, validity of evidence, trustworthiness of statements by authorities, and identification of a number of informal fallacies.

Within the contemporary mainstream behavioral sciences, theorists and researchers have joined informal logic with a strong thrust toward natural science rationality. This combination has resulted in a form of critical thinking largely equated with careful use of methodological procedures and scientific rules of evidence (e.g., Meltzoff, 1998; Ruscio, 2006; Stanovich, 2004)—an approach sometimes referred to as "scientific-analytic reasoning" (Dick, 1991, p. 84; Slife, Yanchar, & Reber, 2005). The primary targets of critical analysis from this perspective are theoretical claims and research results; only those that meet particular scientific and logical criteria can be considered authentic knowledge.

Although theorists within the informal logic movement have agreed on many general issues—for example, that critical thinking is necessary for adequate education in a democracy, that a disposition to think critically must accompany reasoning skills, and that such skills should be generalizable to a variety of domains and contexts—their work has not coalesced into a monolithic viewpoint or set of practices. Indeed, notwithstanding the general acceptance of the informal logic approach to critical thinking in secondary and post-secondary education, diverse critical thinking definitions and strategies can be found in the literatures of various scholarly fields, as observers have noted (e.g., Beyer, 1987; Geersten, 2003; Johnson, 1992; Pithers, 2000).

Consistent with this pattern, prominent theorists associated with the informal logic movement have disagreed on basic issues and advanced a number of positions on how critical thinking should be defined and practiced. For instance, although Richard Paul and Harvey Siegel—two major theorists in the contemporary critical thinking movement—share an underlying commitment to liberal individualism and the development of the autonomous reasoner (cf. Weinstein, 1993; Thayer-Bacon, 2000), they differ substantially on how to conceptualize and prioritize the tasks of critical analysis. To consider just one point of disagreement, Paul has argued that “background logics” (1992, p. 64) and “world views” (p. 467) are vitally important to any position or argument and thus should be carefully considered by critical thinkers, whereas Siegel (1988) has contended that such an emphasis ushers in a “vicious form of relativism” that cannot give rise to meaningful, useful critical thinking practices (p. 14).

Another brief example concerns the contrasting views of Matthew Lipman and Robert Ennis—also prominent theorists in the informal logic movement. In particular, Lipman (1998) has argued that Ennis’s approach to critical thinking overemphasizes outcomes and offers defining characteristics that are too vague to be useful; Lipman’s own conception, of course, aims to remedy these problems. These and other<sup>4</sup> examples of disagreement among prominent theorists suggest that as ubiquitous as the informal logic approach to critical thinking may have become, no settled position on the meaning of critical thinking and its accompanying practices has emerged, nor has continued debate and scholarship in this area suggested that univocality is likely to be forthcoming.

Parallel debates are evident in applied psychology. For example, the ongoing debate about empirically supported treatments and evidence-based practice highlights disagreements about what constitutes evidence of effective treatment. The disagreements among these psychologists are similar to the disagreements among critical thinking theorists (see Kazdin, 2008). Like critical thinking theorists, psychologists struggle to find models of critical thinking that are consistent with their scientific and clinical perspectives on human nature.

#### ALTERNATIVE VIEWS OF CRITICAL THINKING

Although informal logic theorists have propelled critical thinking to its contemporary status, other approaches that offer substantially different conceptualizations of critical analysis have been advanced. Stemming primarily from postmodern and critical theory literatures, these alternatives provide unique, if somewhat less visible, critical thinking practices that present even greater theoretical diversity.

Perhaps most notably, programs based on the thinking of critical theorists such as Jurgen Habermas and Paulo Freire—programs such as emancipatory education (e.g., Hart, 1985), critical pedagogy (e.g., Giroux, 1988; McLaren, 2003), and transformational learning (e.g., Mezirow, 1994)—have been increasingly influential in many domains but particularly in secondary, post-secondary, and adult education. These approaches are heavily concerned with the identification and examination of social institutions, prevailing practices, and hidden assumptions—including those associated with traditional Western science and education—whose influences are thought to oppress large segments of the population, and with the attainment of new perspectives on self, community, and society that enable people to gain more autonomy and control. In essence, advocates of this position seek to promote conscientization (McLaren, 2003, p. 251)—to “raise the consciousness” (Fay, 1975, p. 103) of the oppressed and offer a means of “empowerment” (Giroux, 1997, p. 132). While this movement is evident in some areas of applied psychology—such as the social justice movement—it has yet to make much of an impact on either mainstream theories or practice.

Other theorists (Brookfield, 1997; McPeck, 1981) have questioned both the informal and formal logic approaches to critical thinking on the grounds that there are no generic critical thinking skills to be applied across con-

texts and domains. This contextualist position holds that because different disciplines or areas of inquiry involve different logics, forms of reasoning, methods, purposes, and standards for argumentation and validity, critical thinking must be sensitive to the specific dynamics of the topic and discipline, and such sensitivity would entail more than the routine application of rules to specific situations. For contextualist theorists, an ability to think critically must develop from a solid knowledge of a given discipline and topic and then be supplemented with productive activities, such as analyzing assumptions, examining and creatively constructing alternatives to a given idea or set of ideas, and solving problems in the process of discovery—all of which would be informed by discipline-specific procedures and forms of reasoning.

Still others have called for unique forms of critical analysis that differ not only from the traditional approaches described above but also from one another in their basic characteristics and practices. For instance, various feminist theorists (e.g., Commeyras, 1994; Warren, 1994) have argued that dominant patriarchal meaning systems and frameworks must be challenged and that any view of critical thinking informed by patriarchal traditions—even those of critical theory (Kohli, 1995)—cannot be used in this work; interpretive theorists (e.g., Burbules, 1995; Hostetler, 1994) have emphasized the value of dialogue and the “clash of divergent views” (Hostetler, 1994, p. 143) that moves people toward shared understandings and deeper appreciations of diverse perspectives on the way to a relatively stable (but critically reflexive) position of one’s own; and neo-pragmatists (e.g., Tanner, 1988) have contended, in a Deweyian vein, that critical thinking should begin with contextually situated problems that matter to people and are solved through a type of scientifically oriented, reflective thought. These and other nontraditional conceptions of critical thinking too numerous to catalog here demonstrate the variety of positions that can be taken when engaging in critical analysis. Again, while these schools of thought are often discussed in the training of professional psychologists, they have yet to make much of an impact on the general practice of psychology.

#### LIMITATIONS OF CRITICAL THINKING IN THE SCHOLARLY DISCIPLINES

We cannot provide a detailed examination of the nature and limitations of these various approaches to

critical thinking in the space provided here. However, notwithstanding their diversity we can consider them collectively and point to three primary reasons why critical thinking strategies should not be taken uncritically to be epistemologically neutral vehicles to valid knowledge and progress.

One important limitation of many contemporary critical thinking approaches concerns their emphasis on the systematic application of predetermined rules and standards in the evaluation of ideas, arguments, and evidence.<sup>5</sup> Although there surely must be some rules of practice and evidence to accompany disciplined inquiry—that is, there must be some sense of what counts as valid argumentation and evidence—the rigid use of such rules amounts to little more than an automatic procedure—what one observer termed the “knee jerk application of various skills” (McPeck, 1981, p. 49). Moreover, some theorists have argued that the rule-following approach cannot be viewed as a sufficient form of critical inquiry because it provides no check on its own biases and consequences for numerous social, moral, and theoretical issues (Walters, 1994; McPeck, 1981; Slife et al., 2005). While rule following may usefully protect against the misuse of certain methods, logic, evidence, and argumentation in a formal sense, it fails to take into consideration the fact that the rules themselves must be based on some background assumptions regarding the nature of logic, evidence, and argumentation and that those assumptions and values—as well as the rules they invoke—must be examined for their suitability and helpfulness in particular situations.

A second limitation of prominent critical thinking approaches is that they often hinder scholarship and progress in ways not typically recognized. As one author summarized:

Critical thinking neglects or downplays emotions . . . privileges rational, linear, deductive thought over intuition . . . is aggressive and confrontational rather than collegial and collaborative . . . is individualistic and privileges personal autonomy over the sense of community and relationship . . . deals in abstraction and downplays lived experience and concrete particularity . . . [and] presupposes the possibility of objectivity and thus does not recognize one’s situatedness. (Balin, 1995, pp. 191–192)

Such criticisms are common in the dialogue between scientists and practitioners in professional psychology.

Other authors have expressed related concerns about dominant approaches to critical thinking associated with the formal and informal logic movements, arguing that they do not adequately address power imbalances (Giroux, 1994); that they are culture and gender biased (Norris, 1995); that they should be based on explicitly ethical positions but rarely are (Sears & Parsons, 1991); that they offer abstract intellectual exercises and cannot adequately deal with the complexity, ambiguity, and moral tenor of real-world contexts (Martin, 1992); and that they ignore important elements of constructive thinking, such as care, creativity, and imagination (Thayer-Bacon, 1993; McPeck, 1981; Walters, 1994). Again, such complaints are often made by clinicians in voicing their dissatisfaction with the scientific dimension of professional psychology.

Controversy surrounding the meaning and practice of critical thinking is thus made more complex by such debate and by the fluid nature of critical thinking across time, disciplines, and discourse communities. Increased concern with these fundamental issues suggests that there is much to consider as one embarks upon critical analysis and that no patent, unreflective reliance on any form of critical thinking—especially those that involve a formulaic, rule-following strategy—are to be recommended. Ultimately, the kind of critical thinking used in a given situation should fit coherently with one's values, purposes, and field of endeavor.

A third important limitation of critical thinking approaches concerns the seemingly inescapable axiom that any critical thinking strategy will be informed by a theoretical background of assumptions and values regarding what actually exists, how it can be known, what rules of evidence are acceptable for studying it, and what valid arguments are made about it. Understood this way, any approach to critical thinking is best viewed as a theory about quality argumentation, evidence, and reasoning rather than as a neutral path to knowledge and progress. Although many have acknowledged the assumptive and value-laden nature of critical thinking (e.g., Giroux, 1994; Martin, 1992; McPeck, 1981; Norris, 1992; Sears & Parsons, 1991), one author captured the essence of this point when she concluded that a person "cannot think critically about everything at once: some things must be assumed so that others can be scrutinized critically" (Martin, 1992, p. 176).

An important implication of this point regarding the theoretical nature of critical thinking is that different

background assumptions and values will often lead to differences not only in the conclusions drawn but also in the modus operandi of critical thinking, including what is emphasized, what kinds of knowledge claims and beliefs are ruled out by definition, and what kinds of arguments are viewed as plausible. That critical thinking operates this way should not be surprising; if all critical perspectives are based on assumptions and values, and if those assumptions and values differ from one approach to another, then different critical thinking perspectives will lead in different directions. Although a type of question-begging will have taken place through this process—where one's presuppositions, in a sense, predetermine one's critical assessments—scholars must enter the discussion about critical thinking with at least some vague pre-understanding and purposes already in place if they are to take a stand at all.<sup>6</sup> This means that any critical thinking approach—as a theory about quality argumentation, evidence, and reasoning—will act as a set of blinders that enables particular kinds of criticisms. It should be obvious that this line of thinking has significant implications for counselors and psychotherapists. As we become more aware of the value-laden nature of psychotherapy, the importance of understanding one's philosophical grounding and inherent biases becomes even more evident (Gadamer, 2005).

As an example, scientific analytic reasoning, which was not formulated to address the dynamics of social and institutional systems, is not in a position to promote consciousness-raising, just as emancipatory education, which was not designed to assess methodological details, is not particularly useful for determining whether empirical studies were executed according to accepted scientific standards. The differences between these two types of critical thinking become most apparent when they are brought into dialogue: Advocates of emancipatory approaches have viewed scientific analytic reasoning as a problematic institutional force that dominates much of life in Western society (e.g., Fay, 1975; Hart, 1985; Freire, 1970; Prilleltensky, 1997); advocates of scientific analytic reasoning see the claims of emancipatory theorists as in need of scientific-analytic support to be persuasive (e.g., Ramm, 1998; Kendler, 1994). Similar value clashes are becoming more apparent in applied psychology.

People of faith have long faced the value clashes inherent in various approaches to critical thinking. Consider an example regarding perceptions of the veracity of LDS

scripture. Novak (1990) pointed out that some critical perspectives based on naturalistic assumptions lead to the categorical rejection of many of the claims of the prophet Joseph Smith, including his account of the divine origin of the Book of Mormon. From this naturalistic perspective—where only publicly demonstrable and replicable regularities of nature count as admissible evidence—earthly visitations by God or angels are not possible in principle. While such an approach to critical thinking is surely widespread in the scholarly fields, the bases on which it is premised are not indubitable truisms—the ultimate and irrefutable reality of the situation—but fallible claims about the nature of the world itself and the methods of critical analysis derived from them.

#### TOWARD AN EDIFYING VIEW OF CRITICAL THINKING

Because all critical thinking strategies will be framed by a theoretical background of assumptions and values, and because not all assumptions and values are true or useful, approaches to critical thinking must be carefully examined by those who would employ them. Challenging conceptual questions must be answered by those who wish to engage in thoughtful, reflective, critical analysis and dialogue. What assumptive starting point is most helpful for critical examinations in a given area? Do the assumptions and values that currently dominate the scholarly fields provide the most useful and appropriate resources for critical analysis? Answers to these questions are important because they will inform both the nature and direction of critical thought, and, of course, faulty assumptions will lead in unfruitful or problematic directions.

Like anyone else in the profession, LDS counselors and psychotherapists must carefully consider the kinds of critical thinking that will inform their science and practice. While many critical thinking positions are described in the scholarly literatures, LDS counselors and psychotherapists may wish to take seriously an approach based on the truths and values brought forth by the restored gospel. If the ultimate purpose of critical thinking for LDS scholars and students is unfolding and revealing truth, then the surest foundation for this work is to begin in gospel-centered principles and standards. Such an approach would manifest and clarify the scope and power of the doctrines of the restored gospel. Furthermore, critical thinking grounded in truth would likely lead to edification—which extends human understanding, pro-

motes human well-being, and spreads the gospel of Jesus Christ motivated by love, concern, and respect.

A detailed explication of critical thinking from this perspective is beyond the scope and limitations of this article, and its authors do not consider themselves qualified to make prescriptions for all LDS mental health professionals. However, we can briefly describe one approach to critical thinking from this perspective that is potentially both defensible and edifying.

Given the generally accepted notion that all research, theorizing, and practice will be informed by underlying assumptions and values (as described above), we propose that a view of critical thinking grounded in the restored gospel should be concerned primarily with identifying and evaluating these assumptions and values along with their implications for knowledge and practice. If assumptions and values are logically prior in that they shape the nature, direction, and consequences of psychotherapeutic and scholarly work of all sorts—including use of methods, construction of theories, and development of practical applications—then they should receive primary consideration. In this application the revealed truth can provide a comparative basis for evaluating the veracity and utility of various assumptions and values that inform research and theorizing in the scholarly disciplines.<sup>7</sup> As former BYU President Merrill Bateman (1996) counseled, “We will be more productive and enjoy more freedom if we examine and test secular assumptions under the lamp of gospel truth” (p. 255).

Although this form of critical thinking is designed to help LDS scholars and students evaluate what they find in the marketplace of ideas, it can also facilitate research and theorizing that endeavor to extend basic truths of the restored gospel in scholarly and practical ways. For example, researchers wishing to better understand human learning could—and from our perspective, should—begin by considering the assumptions that will inform their project. Through careful, critical analysis, these researchers might draw guiding assumptions from what is available in the existing disciplinary literatures, or alternatively they may develop other conceptions to ground their work; in either case, their purpose would be to identify an assumptive starting point for their theory and research that is reasonably consistent with basic tenets of the restored gospel.

An example of this kind of analysis was recently conducted by Joseph Ostenson (2008), a graduate student at

BYU. His research, an axiological analysis of the assumptions inherent in a popular theory and approach to couples therapy (Gottman, 1999)—an approach advocated and used by many LDS psychotherapists—revealed hedonism and individuality to be primary underlying values in the theory. Of course, many LDS psychotherapists would be disturbed to realize that they might be using a system with inherent values such as these.

Critical thinking that is rooted in gospel-compatible sources of truth and takes spiritual and religious matters seriously would seem to have a distinct advantage over more worldly counterparts that ignore the truth of such matters. Such thinking would begin not with stark uncertainty, skepticism, or fallible and restrictive methodologies but with inspired historical accounts and revelations that, as President Kimball (1996) observed, “contain the master concepts for mankind” (p. 73) and that can, as Welch and Norton (1996) briefly noted, “provide axioms from which reason can derive useful and insightful implications” (p. vii). Moreover, it would seem that continued reliance on the Holy Ghost can provide believing scholars and students with divine insight as they engage in the critical examination of assumptions and values of all sorts.

We are not aware of any church leaders who have explicitly addressed critical thinking as practiced in the contemporary academic arena, but some have raised the possibility of framing academic and scholarly work in the manner we have described. One overriding message seems to be that the restored gospel of Jesus Christ provides more than a set of religious observances; it provides a perspective on human existence and knowledge that can be deployed in scholarly projects and critiques. Thus LDS scholars and psychotherapists have been counseled that in their work they “must not merely ‘ape the world’” (Kimball, 1996, p. 66) and that “if we limit ourselves to the wisdom of men, we will end up like the Nephites, who, boasting in their own strength, were destroyed because they were ‘left in their own strength (Hel. 4:13)’” (Oaks, 1976, p. 127). A bit more directly, in his Second Century Address to BYU, President Kimball (1996) stated:

We must be willing to break with the educational establishment (not foolishly or cavalierly, but thoughtfully and for good reason) in order to find gospel ways to help mankind. Gospel methodology, concepts, and insights can help us to do what the world cannot do in its own frame of reference. (p. 72)

These quotations suggest that there is a precedent for not taking restored truths lightly in our academic or clinical work, including the work of critical thinking, and that an edifying conception of critical thinking based on the perspective of the restored gospel is not an outlandish idea.

As with any form of careful examination and evaluation, an approach to critical thinking grounded in the restored truth brings with it certain responsibilities. One responsibility of those who adopt this approach is to know the field well. To perform the kind of critical analysis we recommend, psychotherapists and scholars must have intimate awareness and understanding of disciplinary theories and methods at their deepest levels, including the best practices, the knowledge bases, and the underlying philosophies in an area of research and practice. Nibley’s (1978) warning about zeal without knowledge, as well as warnings by BYU presidents Rex E. Lee (1996) and Dallin H. Oaks (1976), seem particularly relevant here. In essence, LDS professionals must understand the scholarly disciplines well in order to make contributions to them—through critical analysis or otherwise—and to receive revelation that will further those fields. It should always be kept in mind that one who seeks to conduct a profoundly critical analysis of a field has the need and the responsibility to have a profound understanding of the field. The knowledge of an earnest critic must equal or exceed that of an adherent or practitioner.

A second responsibility of those who employ this approach to critical thinking is critical self-examination coupled with humility. From the perspective we advocate, which holds that the results of a critical examination will reflect assumptions and values that inform the critical inquiry process, it is crucial to reflect on one’s own assumptions and values over time. Whether the assumptions and values that guide critical thought take scholars and students in truthful and valuable directions is a question of continual importance. For critical inquirers to be willing to engage in this continued self-examination, however, they must cultivate a sense of humility about their own assumptive frameworks, abilities, and projects. Even when researchers or practitioners base their work on a set of beliefs that seem consistent with principles of the restored gospel, they must be open to the possibility that their understandings and uses of these beliefs are incomplete and imperfect such that they will not effectively advance critical inquiry, scholarship, or the work of the church. For instance, researchers may champion human

agency in theories of development and personality or in their clinical work, but some views of agency are likely to be more helpful than others. Discussions of this issue over the years by Bergin (1975), Hook (1958), Howard (1994), Rychlak (1988), Sappington (1990), Williams (1992), and others reflect the diversity and complexity of thought around this one issue. Though all LDS psychotherapists would likely espouse the notion of human or moral agency, how many would have the breadth and depth of knowledge in the area to critically analyze the construct and their use of it in scholarship or practice?

Indeed, the limits of human understanding strongly suggest that researchers must be willing to revise assumptions and knowledge claims as further experience (of all sorts) may invite. Perhaps no one said this more clearly than Hugh B. Brown (1996):

We have been blessed with much knowledge by revelation from God which, in some part, the world lacks. But there is an incomprehensibly greater part of truth which we must yet discover. Our revealed truth should leave us stricken with the knowledge of how little we really know. It should never lead to an emotional arrogance based upon a false assumption that we somehow have all the answers—that we in fact have a corner on truth, for we do not. (p. 86)

Although some beliefs would seem to be non-negotiable for LDS scholars and students, such as those pertaining to the existence of an embodied God, the reality of apostolic authority, redemption through Christ's atonement, and the historical truthfulness of the events of the restoration,<sup>8</sup> there is much more to be learned by God's children—within and without the church—and much more that could inform edifying conceptions of critical thinking and the growth of knowledge. Thus while LDS scholars and students can resist "false fashions in education" (Kimball, 1996, p. 65) by privileging "those basic principles which have proved true and right and have guided good men and women and good universities over the centuries," (p. 77), they need not uncritically reject the whole of secular scholarship, just as they need not uncritically accept it. As Elder Oaks (1976) noted, "The learning of men, when it is true, is inspired of God" (p. 126). Sifting helpful assumptions, arguments, and findings from those of less worth, of course, is a major function of the approach to critical thinking that we advocate.

A third responsibility of those who employ this approach to critical thinking is concerned with the articula-

tion of important findings and analyses in the languages of the scholarly disciplines, presented to those scholars who would find them especially relevant. If insights from LDS doctrine and revelation—particularly as developed through research programs—can help inform theory and practice, then they should be presented persuasively and helpfully to those already practicing in the world. Indeed, many years ago Elder Neal A. Maxwell (1976) admonished LDS behavioral scientists to do just this (cf. Bergin, 1979; Williams, 1998). Thus the critical examinations that we recommend, as well as the innovative theory and research that spring from them, could be brought to the world in scholarly ways.

In summary, with careful academic preparation in worldly counseling approaches and a deep understanding of the gospel, LDS counselors can develop their professional knowledge based on truthful assumptions, employ their knowledge with humility, and communicate their findings to other mental health professionals in the world. Several implications for clinical practice arise when critical thinking is based upon a gospel foundation.

First, a counselor who makes his or her values explicit becomes a better counselor. A thoughtful analysis of how to work with values in counseling appears in Richards and Bergin (2005, pp. 166–171; 193–199). These authors discuss the ethical concerns with value imposition in therapy and make suggestions for how therapists can acknowledge values but refrain from coercing or subtly influencing clients to adopt their own position. This work, along with that of others outside the LDS faith (e.g., Tjeltveit, 1986), is exploring and should continue to explore and refine such issues. Additionally, a counselor who knows his or her values is not only more sensitive to and thoughtful about working with values in therapy but is more attuned to his or her own counter transference. Knowing one's own values well makes a counselor more able to acknowledge when those values are interfering with treatment and more apt to seek supervision, consultation, further education, or referral to another provider.

Another clinical benefit of using a critical thinking approach based on the restored gospel is increased ability for therapists to access healing resources in and out of therapy. Richards and Bergin (2005) detail many of the ways therapists who believe in God's power and influence can benefit from accessing such power with clients. For example, ethically informed therapists can rely on personal private prayer and on the inspiration of the Holy

Ghost before and during client sessions. They can sensitively encourage clients to rely on prayer, scripture, worship, spiritual community, and personal revelation (see Richards & Bergin, 2005, pp. 251–279). How therapists access the healing power of the restored gospel and how they help their clients do so can be further defined and explored with benefits to client and therapist alike.

A clinical implication of a gospel-based approach is its emphasis on counselors becoming scientist-practitioners. Such an approach allows therapists, who are working within appropriate ethical boundaries, to experiment with gospel-based principles and their application in therapy both on an individual, case-by-case basis and in clinical research. Returning to the example of agency, therapists with an understanding of different conceptualizations of agency can experiment with which of these will bear the most fruit in clinical treatment. An LDS therapist would not discount or undervalue agency, given his or her religious beliefs, but would be attuned to the importance of this principle in clinical work. For example, he or she would be aware of when use of a secular theory allows a therapist to inadvertently misuse his or her authority to further limit a client's agency. In the example of agency, reliance on an important principle of the gospel that is defining for human purpose is central to an LDS counselor's critical thinking about psychotherapy approaches and might even lead to insights that could be shared with those outside the LDS faith.

In their personal explorations with clients and in consultation with other LDS counselors and psychotherapists, LDS therapists can positively influence therapists outside the LDS faith. For example, Richards and Bergin (2005) have sought to create a place in mainstream psychotherapy for a spiritual approach to counseling that may create a possible framework for an LDS-specific counseling approach as well as particular spiritual approaches for other denominations. Their approach begins with philosophical and theistic assumptions about human nature, personality, and purpose that are aligned with truths and principles of the gospel of Jesus Christ. These therapists ground their work on gospel-based truths and bring their awareness in a helpful way to counselors of other denominations and to secular practitioners. There are many creative, thoughtful LDS practitioners who, with careful preparation in the gospel and an understanding of secular approaches, could bring new ideas and tools to secular mental health treatment

or even to mental health approaches from other religious denominations.

These clinical implications just scratch the surface of what might arise from application of a critical thinking approach grounded on an LDS foundation.

#### CONCLUSION

The view of critical thinking we have described would lead to distinct kinds of examinations and conclusions—for example, those that assume a priori the truth of the restored gospel and that analyze other ideas and assumptions, either secular or spiritual, in light of what has been revealed. From a logical standpoint, such an approach begs the question of truth by presupposing the nature of what it will examine (i.e., what is true or false about it, what can be known about it); but as suggested above, this type of question-begging is inescapable in the processes of any critical, systematic inquiry and thus will inhere in all attempts at critical thought. Inquirers must begin their critical examination somewhere, based on some perspective that will raise certain questions and obviate others; without such a perspective, there would be no basis for the formulation of questions or critiques in the first place. As Elder Maxwell (1976) suggested, “A commitment to truth requires the rejection of some things as well as the acceptance of others” (p. 594). It should not be surprising or problematic, then, that critical inquirers would seek a trustworthy starting point for their line of questioning. For many LDS church members, this starting point could be faith in Jesus Christ and his restored gospel, as well as continuing revelation. The critical thinking that ensues, then, could replace formulaic rule-following, reactive fault-finding, and limited rationalities with a searching examination of ideas, arguments, and evidence, performed to edify the human family, based on the surest foundation possible.

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#### REFERENCES

- Balin, S. (1995). Is critical thinking biased? Clarifications and implications. *Educational Theory, 45*, 191–192.
- Bateman, M. J. (1996). Learning in Zion: Two addresses. In J. W. Welch & D. E. Norton (Eds.), *Educating Zion*. Provo, UT: BYU Studies Press.
- Bergin, A. E. (1975). Toward a theory of human agency. *BYU Studies, 16*, 165–183.

- Bergin, A. E. (1979). Bringing the restoration to the academic world: Clinical psychology as a test case. *BYU Studies*, 19, 449–473.
- Beyer, B. K. (1987). *Practical strategies for the teaching of thinking*. Boston, MA: Allyn & Bacon.
- Black, M. (1946). *Critical thinking: An introduction to logic and scientific method*. New York, NY: Prentice-Hall.
- Blair, J. A., & Johnson, R. H. (Eds.). (1980). *Informal logic: The first international symposium*. Inverness, CA: Edgepress.
- Bode, B. H. (1921). *Fundamentals of education*. New York, NY: The MacMillan Company.
- Brookfield, S. (1997). Assessing critical thinking. *New Directions for Adult and Continuing Education*, 75, 17–29.
- Brookfield, *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting*
- Brown, H. B. (1996). An eternal quest: Freedom of the mind. In J. W. Welch & D. E. Norton (Eds.), *Educating Zion* (81–92). Provo, UT: BYU Studies Press.
- Burbules, N. C. (1995). Reasonable doubt: Toward a postmodern defense of reason as an educational aim. In W. Kohli (Ed.), *Critical conversations in philosophy of education*. New York, NY: Routledge.
- Burtt, E. A. (1954). *The metaphysical foundations of modern science*. Garden City, NY: Doubleday Anchor.
- Commeyras, M. (1994). Exploring critical thinking from a feminist standpoint: Limitations and potential. In C. Kinzer, D. Leu, & J. Peter (Eds.), *Multidimensional aspects of literacy research, theory, and practice: Forty-third yearbook of the national reading conference*. Chicago, IL: National Reading Conference, Inc.
- Copi, I. (1953). *Introduction to logic*. New York, NY: The MacMillan Company.
- Dewey, J. D. (1910). *How we think*. Mineola, NY: Dover Publications.
- Dewey, J. D. (1916). *Democracy and education*. New York, NY: The MacMillan Company.
- Dick, D. (1991). An empirical taxonomy of critical thinking. *Journal of Instructional Psychology*, 18(2), 79–92.
- Ennis, R. H. (1996). *Critical thinking*. Upper Saddle River, NJ: Prentice Hall.
- Faust, J. E. (1997, November). Learning for eternity. Speech presented at Brigham Young University, Provo, UT. Retrieved from <http://speeches.byu.edu/reader/reader.php?id=3003&x=56&y=6>.
- Fay, B. (1975). *Social theory and political practice*. London, England: George Allen & Unwin Ltd.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York, NY: Continuum.
- Gadamer, H. G. (2005). *Truth and method* (2nd ed., revised; J. Weinsheimer & D. G. Marshall, Trans.). London, England: Continuum.
- Geersten, H. R. (2003). Rethinking thinking about higher-level education. *Teaching Sociology*, 31, 1–19.
- Giroux, H. A. (1988). *Teachers as intellectuals: Toward a critical pedagogy of learning*. Granby, MA: Bergin & Garvey.
- Giroux, H. (1994). Toward a pedagogy of critical thinking. In K. S. Walters (Ed.), *Re-thinking reason: New perspectives in critical thinking*. Albany, NY: SUNY Press.
- Giroux, H. A. (1997). *Pedagogy and the politics of hope: Theory, culture, and schooling*. Boulder, CO: Westview Press.
- Gottman, J. M. (1999). *The marriage clinic: A scientifically based marital therapy*. New York, NY: WW Norton & Company.
- Guba, E. G. (1990). *The paradigm dialog*. Newbury Park, CA: Sage Publications.
- Hafen, B. C. (1996). The dream is ours to fulfill. In J. W. Welch & D. E. Norton (Eds.), *Educating Zion*. Provo, UT: BYU Studies Press.
- Hart, M. (1985). Thematization of power, the search for common interests, and self-reflection: Towards a comprehensive concept of emancipatory education. *International Journal of Lifelong Education*, 4, 119–134.
- Hook, S. (Ed.). (1958). *Determinism and freedom in the age of modern science*. New York, NY: Collier Books.
- Hostetler, K. (1994). Community and neutrality in critical thought: A nonobjectivist view on the conduct and teaching of critical thinking. In K. S. Walters (Ed.), *Re-thinking reason: New perspectives in critical thinking*. Albany, NY: SUNY Press.
- Howard, G. (Ed.). (1994). Special topic: Free will and psychology. *Journal of Theoretical and Philosophical Psychology*, 14, PAGE NUMBERS.
- Johnson, R. E. (1992). *The problem of defining critical thinking*. S. P. Norris (Ed.). New York, NY: Teacher's College Press.
- Kazdin, A. E. (2008). Evidence-based treatment and practice: New opportunities to bridge clinical research and practice, enhance the knowledge base, and improve patient care. *American Psychologist*, 63(3), 146–159.
- Kendler, H. H. (1994). Can psychology reveal the ultimate values of humankind? *American Psychologist*, 49(11), 970–971.
- Kimball, S. W. (1996). Climbing the hills just ahead: Three addresses. In J. W. Welch & D. E. Norton (Eds.), *Educating Zion*. Provo, UT: BYU Studies Press.
- Kohli, W. (1995). Educating for emancipatory rationality. In W. Kohli (Ed.), *Critical conversations in philosophy of education*. New York, NY: Routledge.
- Lee, R. E. (1996). By study and also by faith. In J. W. Welch & D. E. Norton (Eds.), *Educating Zion*. Provo, UT: BYU Studies Press.

- Lipman, M. (1998). Critical thinking: What can it be? *Educational Leadership*, 46, 38–43.
- Lipman, M. (2003). *Thinking in education* (2nd ed.). New York, NY: Cambridge University Press.
- Marias, J. (1967). *History of philosophy*. New York, NY: Dover.
- Martin, J. R. (1992). Critical thinking for a humane world. In S. P. Norris (Ed.), *The generalizability of critical thinking: Multiple perspectives on an educational ideal*. New York, NY: Teacher's College Press.
- Maxwell, N. A. (1976). Some thoughts on the gospel and the behavioral sciences. *BYU Studies*, 16, 589–602.
- McLaren, P. (2003). *Life in the schools* (4th ed.). Boston, MA: Allyn & Bacon.
- McPeck, J. E. (1981). *Critical thinking and education*. New York, NY: St. Martin's Press.
- Meltzoff, J. (1998). *Critical thinking about research*. Washington, DC: American Psychological Association Press.
- Mezirow, J. (1994). Understanding transformation theory. *Adult Education Quarterly*, 44, 222–232.
- Mezirow, J. (1998). On Critical Reflection. *Adult Education Quarterly*, 48(3), 185–198.
- Nibley, H. (1970). Educating the saints: A Brigham Young mosaic. *BYU Studies*, 11, 61–87.
- Nibley, H. (1978). Zeal without knowledge. *Dialogue: A Journal of Mormon Thought*, 11, 101–112.
- Norris, S. P. (1992). Introduction: The generalizability question. In S. P. Norris (Ed.), *The generalizability of critical thinking: Multiple perspectives on an educational ideal*. New York, NY: Teacher's College Press.
- Norris, S. P. (1995). Sustaining and responding to charges of bias in critical thinking. *Educational Theory*, 45, 199–211.
- Novak, G. F. (1990). Naturalistic assumptions and the Book of Mormon. *BYU Studies*, 30, 23–40.
- Oaks, D. H. (1976, July). A house of faith. Speech presented at a Brigham Young University Campus Forum, Provo, UT.
- Ostenson, J. A. (2008). *The neglect of divorce in marital research: An ontological analysis of the work of John Gottman* (Master's thesis). Retrieved from [http://contentdm.lib.byu.edu/cdm4/item\\_viewer.php?CISOROOT=/ETD&CISOPTR=1639&CISOBOX=1&REC=2](http://contentdm.lib.byu.edu/cdm4/item_viewer.php?CISOROOT=/ETD&CISOPTR=1639&CISOBOX=1&REC=2).
- Paul, R. W. (1992). *Critical thinking: What every person needs to survive in a rapidly changing world*. A. J. A. Binker (Ed.) Rohnert Park, CA: Foundation for Critical Thinking.
- Pithers, R. T. (2000). Critical thinking in education: A review. *Educational Research*, 42, 237–249.
- Prilleltensky, I. (1997). Values, assumptions, and practices: Assessing the moral implications of psychological discourse and action. *American Psychologist*, 52(5), 517–535.
- Ramm, D. (1998). Consider the scientific study of morality. *American Psychologist*, 53(3), 323–324.
- Richards, P. S. & Bergin, A. E. (2005). *A spiritual strategy for counseling and psychotherapy*. Washington, DC: American Psychological Association.
- Robinson, D. N. (1986). *An intellectual history of psychology*. Madison, WI: University of Wisconsin Press.
- Ruscio, J. (2006). *Critical thinking in psychology: Separating sense from nonsense* (2nd ed.). Belmont, CA: Thomson Wadsworth.
- Rychlak, J. F. (1988). *The psychology of rigorous humanism* (2nd ed.). New York, NY: New York University Press.
- Sappington, A. (1990). Recent psychological approaches to the free will versus determinism issue. *Psychological Bulletin*, 108, 19–29.
- Schultz, C. R. (2002). Faith obedience. *Ensign*, 32(May), 29–31.
- Scriven, M. (1976). *Reasoning*. New York, NY: McGraw Hill.
- Sears, A., & Parsons, J. (1991). Towards critical thinking as an ethic. *Theory and Research in Social Education*, 19, 45–68.
- Siegel, H. (1988). *Educating reason*. New York, NY: Routledge.
- Slife, B. D., & Williams, R. N. (1995). *What's behind the research? Discovering hidden assumptions in the behavioral sciences*. Thousand Oaks, CA: Sage Publications.
- Slife, B. D., Yanchar, S. C., & Reber, J. S. (2005). Thinking critically about critical thinking. In B. D. Slife, J. S. Reber, & F. C. Richardson (Eds.), *Critical thinking in psychology*. Washington, DC: American Psychological Association Press.
- Stanovich, K. E. (2004). *How to think straight about psychology* (6th ed.). Boston, MA: Pearson Allyn & Bacon.
- Tanner, L. N. (1988). The path not taken: Dewey's model of inquiry. *Curriculum Inquiry*, 18, 471–479.
- Thayer-Bacon, B. (1993). Caring and its relationship to critical thinking. *Educational Theory*, 43, 323–340.
- Thayer-Bacon, B. (2000). *Transforming critical thinking: Thinking constructively*. New York, NY: Teacher's College Press.
- Tjeltveit, A. C. (1986). The ethics of value conversion in psychotherapy: Appropriate and inappropriate therapist influence on client values. *Clinical Psychology Review*, 6, 515–537.
- Walters, K. (1994). Critical thinking, rationality, and the vulcanization of students. In K. S. Walters (Ed.), *Re-thinking reason: New perspectives in critical thinking*. Albany, NY: SUNY Press.
- Walton, D. N. (1989). *Informal logic: A handbook for critical argumentation*. New York, NY: Cambridge University Press.
- Warner, T. (1971, November). An open letter to students: On hav-

- ing faith and thinking for yourself. *New Era*. Retrieved from <http://lds.org/new-era/1971/11/an-open-letter-to-students-on-having-faith-and-thinking-for-yourself?lang=eng>.
- Warren, K. J. (1994). Critical thinking and feminism. In K. S. Walters (Ed.), *Re-thinking reason: New perspectives in critical thinking*. Albany, NY: SUNY Press.
- Weinstein, M. (1993). Critical thinking: The great debate. *Educational Theory*, 43, 99–117.
- Welch, J. J., & Norton, D. E. (1996). Foreword. In J. W. Welch & D. E. Norton (Eds.), *Educating Zion*. Provo, UT: BYU Studies Press.
- Williams, R. N. (1992). The human context of agency. *American Psychologist*, 47(6), 752–760.
- Williams, R. N. (1998). Restoration and the “turning of things upside down”: What is required of an LDS perspective. *AMCAP Journal*, 23(1), 1–30.
- Wilson, K. J. (1999). By study and also by faith: The faculty at Brigham Young University responds. *BYU Studies*, 38, 157–175.
- Yanchar, S. C., & Slife, B. D. (2004). Teaching critical thinking by examining assumptions. *Teaching of Psychology*, 31, 85–90.
- scholarship in their work; moreover, a majority of the faculty members in this survey supported the notion that students should be taught to think critically about a variety of issues; for details, see Wilson (1999).
2. For more on critical thinking in antiquity, see Thayer-Bacon (2000). For more detailed treatments of Western intellectual history, see Marias (1967) and Robinson (1986).
  3. For a review of this movement, see Thayer-Bacon (2000). For works by major theorists in this movement, see Blair and Johnson (1980), Ennis (1996), Lipman (2003), Paul (1992), Scriven (1976), Seigel (1988), and Walton (1989).
  4. For more on the debates within contemporary critical thinking, see Thayer-Bacon (2000) and Johnson (1992).
  5. Scientific analytic reasoning is probably the most visible rule-following approach, although there are others. For more on this point, see Burbules (1995), McPeck (1981), and Walters (1994).
  6. For more on the necessity of presuppositions, see Brookfield, Burt (1954), Guba (1990), Palmer (1969), Paul (1992), Sears and Parsons (1991), and Slife and Williams (1995).
  7. For more on assumption analysis as a form of critical thinking, see Mezirow (1998), Slife et al. (2005), Slife and Williams (1995), and Yanchar and Slife (2004).
  8. As Elder Hafen (1996) advised, LDS scholars and students “cannot allow [their] most sacred premises to be altered or even minimized by secularist assumptions” (p. 220).

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#### ENDNOTES

1. For example, a 1998 survey of BYU faculty members suggested that they overwhelmingly favored the integration of faith and