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## APPLIED BEHAVIOR ANALYSIS: NICHE THERAPY PAR EXCELLANCE

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ABSTRACT: Wong (2006), and Wyatt and Midkiff (2006) focus on the social and economic factors that have promoted biological psychiatry and marginalized behaviorism in the contemporary treatment of problems in living and "mental illness." I suggest an additional, perhaps even more central, reason is that biological psychiatry promises to increase autonomy while behaviorism is seen to constain freedom. If, as I also suggest, the human belief in agency and desire for autonomy are products of evolution, then biological psychiatry, unlike behaviorism, is agreeable with an important facet of human nature. From this perspective, several strategies that might enhance the social acceptance of behaviorism are briefly offered.

The articles by Wong (2006), and Wyatt and Midkiff (2006) in this issue of Behavior and Social Issues address the same basic cultural phenomenon and arrive at the equivalent core conclusion: behaviorism has lost the mental health war for society's mind and pocketbook. These authors put forth a brave front, as they try to rally the bedraggled behavioral troops. Wong argues that the political and economic drivers that propel the biomedical model's hegemony in the treatment of psychosis are "based neither on logical arguments, empirical evidence, nor other elements of good science, so they should not deter behavior analysts or other researchers from continuing to explore alternative means of understanding and treating these disorders" (p. 170). He offers many suggestions where behavior analysts can potentially influence the system and effect constructive change. Wyatt and Midkiff contend that the interests of the psychiatric profession and the pharmaceutical industry converge in the promotion and dominance of a biological causation model of mental illness. They call "for a paradigm shift, away from extreme biological causation and toward an environmental causation model" (p. 147). Yet Wyatt and Midkiff are not sanguine that such a shift will occur in light of the enormous power that the psychiatric and the pharmaceutical groups wield. I share their pessimism, but perhaps on a different basis.

Wong, Wyatt and Midkiff document the powerful ideological, economic, and political factors that have rendered empirical data irrelevant in the treatment of severely dysfunctional behavior, as exemplified by the stunning invisibility of Paul and Lentz' (1977) landmark research on an institutional token economy program. Yet, beyond the seemingly obvious reality that behaviorism has lost the mind and the pocketbook of society lurks an additional cultural factor: Behaviorism has also lost society's heart, or

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perhaps more accurately, it never had it. Its failure to harmonize with society on an emotional level neutralizes its impressive intellectual and fiscal attractions. Ironically, behaviorism—an approach that explicitly values outcome and empiricism—is nevertheless marginalized by a blatantly pragmatic, scientifically-oriented society.

The reason for behaviorism's limited social presence may reside in an aspect of what is often called human nature. Recently, I suggested that the human belief in free will is an evolutionary psychological adaptation. That is, over the course of human history, those persons who believed they possessed an internal agency that permitted free choice were more effective in influencing their environment and in exerting self-restraint and, ultimately, more successful in producing offspring<sup>2</sup> (Rakos, 2004). This conceptualization further suggests that an internal "sense of autonomy" functions as a powerful primary reinforcer for humans (Rakos, 2005). Unfortunately, these innate human characteristics render overt behavioral control—the hallmark of applied behavior analysis—fundamentally distasteful to most people, both in the philosophy it embodies and in the operations it entails. In contrast, the offerings of psychiatry and pharmaceuticals possess far more general appeal because they support rather than attack the unlearned human desire for autonomy. The medical approach conveys to unhappy and dyfunctional persons that a biological problem—perhaps even a disease—is responsible for inhibiting the expression of free will, and that medication can restore or even expand agency. In effect, responsibility for behavior is redirected to a disease that can be treated through the low-effort response of medication ingestion that then increases the amount one experiences the "sense of autonomy" primary reinforcer. From this perspective, the various cultural factors that Wong, Wyatt and Midkiff identify bolster what is likely to be a *natural* human preference, confronting us with an even more daunting task: Can we capture the heart as well as the mind and pocketbook of society?

The heart may prove to be the most difficult of the three to capture, if the resolute belief in free will is indeed an evolutionary adaptation. If natural and sexual selection have instilled in humans an inherent sense of agency that cannot be shaken by logic or evidence, then control of behavior that undermines or challenges the sense of autonomy will be experienced as unpalatable or even aversive. And it is overt, discernable behavior control—the kind favored by behaviorists (cf., Skinner, 1971)—that will most strongly impede a sense of autonomy, and in essence, diminish the amount of an important primary reinforcer that one can acquire. In fact, the constriction of autonomy may very well have been a main contributing factor to the impermanence of the experimental communities inspired by Skinner's (1948) novel, *Walden Two* (Kuhlmann, 2005; Rakos, 2006). The ardent behaviorists who established these communities, and the behaviorally-inclined persons they recruited or attracted to the experiments, by and large wanted to be Frazier.

Other observations also support the hypothesis that behaviorism itself, through its challenge to free will and autonomy, contributes importantly to its limited social

<sup>&</sup>lt;sup>2</sup> I theorize that the belief in free will functions as a motivating operation (Laraway, Snycerski, Michael, & Poling, 2003).

acceptance. For instance, contemporary behavior analysis may be a fringe treatment for psychosis but it is a core service for persons diagnosed with autism and developmental disabilities, despite a pronounced psychiatric influence that promotes a generous dispensation of psychotropic medication. This suggests that the cultural acceptance of behavioral interventions with autistic and developmentally disabled persons is only partly due to empirically demonstrated efficacy; after all, the data demonstrate similar impact on psychotic disorders, as Wong so persuasively summarizes. The additional factor that may allow behavioral interventions to be socially accepted in developmental settings is the assumption that the target persons—those who are subject to the behavior control procedures—possess, by the nature of their disabilities, impaired or limited free will and a correspondingly diminished "need" for autonomy. In other words, autonomy is seen as a weaker primary reinforcer for developmentally disabled persons than it is for nondisabled individuals. In an implicit cost-benefit analysis, society can conclude that behavior control can be imposed on developmentally disabled persons because the cost to them is minimal—the limitation of a weak primary reinforcer is not in actuality that much of a loss. Naturally, this hypothesis is in no way intended to be a negative comment about the inherent worth of autistic and developmentally disabled persons, the use of behavior analysis with these populations, or the many skilled behavior analysts who devote their careers to enhancing the behavioral freedom and quality of life of autistic and developmentally delayed persons.

Another phenomenon that may reflect issues of autonomy is the relative health of cognitive behavior therapy in the institutional treatment of psychosis (Combs et al., 2006) compared to behavior analytic intervention for the same problem. While there are "very few graduate training programs that offer specialty training in psychosis from a cognitive-behavioral perspective" (Combs et al., 2006, p. 12), there are at least a handful. Are the data stronger for cognitive behavior therapy compared to applied behavior analysis for psychotic problems? That is of course an empirical question, but as Wong points out, behavior analytic interventions marshaled impressive experimental support—until the experiments stopped. This leaves us with the situation described by Combs et al. (2006): a cognitive-behavior therapy training regimen in which faculty and students meet weekly to discuss case formulation, utilizing a variety of cutting edge and just-published cognitive therapy case books and texts. However, "(n)ot to lose sight of our behavioral roots, readings on the use of reinforcement and extinction strategies to treat psychosis are included" (p. 12). As we imagine a tattered copy of Krasner and Ullmann (1965) being passed around as a curious relic to the eager, cognitively-oriented students, we should not be surprised that an intervention that explicitly prioritizes conscious thought, the very capacity that permits the belief in free will to exist and persist, has achieved far greater cultural acceptance than behavior analysis (Dennett, 2003; Rakos, 2004).

A final example can be seen in the differing ways that biological psychiatry and behaviorism acknowledge and meet the intrinsic human desire for autonomy. Biological psychiatry promotes a model of human behavior that is quite user-friendly: the pharmacological adjustment of neurotransmitter imbalances in the brain removes a

chemical straightjacket, thus allowing one to pursue goals effectively and experience genuine freedom. Best of all, biological psychiatry offers autonomy in a form to which humans can relate: substance use. Across all cultures throughout the history of humankind, substances of various sorts have been ingested for their medicinal and/or mind-altering properties (Rassool, 1998); perhaps a second reason biological psychiatry is so psychologically comfortable for people today is because substance ingestion itself is an evolved adaptation of humans. That is, as humans evolved, those persons who used psychoactive substances functioned better in ways that eventually led to greater numbers of offspring. Improved adaptation from ingestion of substances might include, for example, more intense experience of autonomy, greater creativity in problem-solving, increased pain tolerance, greater physical endurance and resistance to infection, increased suppression of aggressive behavior, more intense sex drive, and enhanced characteristics associated with sexual selection. Biological psychiatry, in other words, may simply be the contemporary version of humanity's ever-present psychotropic pharmacy. Ironically, if that is the case, evolutionary processes may very well produce—gradually and subtly—societies that mirror the "Brave New World" that epitomized dystopia to so many when it was presented as an intact stimulus in Huxley's (1932) book.

It is an open question whether these musings possess even partial validity. But assume, for the moment, that they do; what are the implications for behavior analysis in a society moving closer to a brave new world than to a Walden Two? An obvious opportunity, one that has been heard around the Association for Behavior Analysis convention for years, is to for behaviorists to take special care in presenting behavioral interventions to the public. There are data to support such attention. Woolfolk, Woolfolk, and Wilson (1977) demonstrated that reinforcement procedures in the classroom were judged negatively when they were labeled as "behavior modification" and alluded to "controlling the behavior of laboratory animals." In contrast, positive evaluations of the identical interventions were obtained when they were called "humanistic education" and referred to feelings, self-esteem, and growth. O'Leary (1984) found that newspaper references to behavioral intervention were unfavorable in some contexts (e.g., behavior modification in prison settings) and balanced or even positive in others (e.g., behavior therapy for controlled drinking, anxiety, and depression). Behavioral treatments have been shown to garner positive reactions when their rationales and procedures are clearly specified (Foxx, Bremer, Schutz, Valdez, & Johndrow, 1996; O'Brien & Karsh, 1990), and when their efficacy and scientific nature are emphasized, case exemplars are provided, and the focus of change is broadly conceptualized to include affect, cognition, and behavior (Kazdin & Krouse, 1983).

Though behaviorists are reasonably sensitive to these issues today, the sterile perception of the approach remains strong. In the interest of scientific precision, behaviorism's generous humanity too often becomes hopelessly masked by language and conceptions that challenge autonomy and cast an aura of dehumanization over the entire approach. Even people who prefer treatments that have scientific support do not necessarily want to be a subject in the scientific endeavor, especially when the outcome

measure of interest is their behavior and success is measured by the extent to which their behavior is predictable.

Behaviorists also may achieve wider social acceptance by increasing political involvement and visibility in the mental health professions. One strategy to increase influence could be to work toward a defined and relatively limited goal with carefully chosen allies whose interests overlap. For example, the American Psychiatric Association's (2000) Diagnostic and Statistical Manual of Mental Disorders (DSM) does much to define how money will be distributed to the various helping professions and to the pharmaceutical industry; it is the glue that holds the entire biomedical mental health system together. Perhaps we shouldn't be surprised that the blatantly nonscientific manner in which syndromes are selected for inclusion in the DSM are well documented (e.g., Caplan, 1995; Wong, 2006) but not widely appreciated. With health care in America heading for redefinition in general, now may be a good time for behavior analysts to seek strategic alliances with other groups with whom core interests are shared. The alliance could work to influence the next revision of the diagnostic bible so that it reflects a classification system derived primarily from scientific data rather than from social consensus. Such a classification system could easily accommodate third party reimbursement for treating functionally-defined problems such as "social skill deficit," "time management skill deficit," "verbal behavior excess," and "excessive tantrum behavior," and would open an expanded world of mental health service delivery not only for behavior analysts but for consumers of these services as well.

Finally, Wong (2006) alludes to the practical problems faced by institutional token economies, including staff training and motivation. These kinds of concerns were articulated by behaviorists years ago when such institutional programs were in vogue (e.g., Reppucci & Saunders, 1974; Tharp & Wetzel, 1969). Unfortunately, this dilemma remains with us today: multifaceted, dynamic behavioral programs demand a relatively high and consistent response effort from those who are expected to implement the procedures. Further, staff may experience the complexity of behavioral programs, with their numerous operational definitions and specified rules, levels, contingencies, etc., as a constraint on workplace autonomy. Thus, to the staff, implementing a behavioral program can be aversive on several counts: a great deal of continuous effort is required, the effort isn't regularly reinforced, and the effort feels coerced. Behavioral interventions need to be subtle and simple enough so that involvement with them—as mediator as well as target—produces the "sense of autonomy" reinforcer. In other words, a certain amount of imprecision or "error" may need to be in the system for this reinforcing sensation to be produced.

In the end, Wong, Wyatt and Midkiff present compelling reasons for behavior analysts to incorporate political activity into our role definition. But behavior analysts must do this wisely, as have the psychiatric profession and the pharmaceutical industry. Among the many things their successful cultural impact can teach behavior analysts is a

<sup>&</sup>lt;sup>3</sup> There is no question that the response effort to dispense medication at specified time periods is much less than to implement and operate a token economy.

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simple, but painful, lesson: We must convince society that we understand, accept, and value the autonomous man that Skinner (1971) so eloquently and convincingly dismantled.

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