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ON REINVENTING OBM:  
COMMENTS REGARDING GELLER'S PROPOSALS FOR CHANGE

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Abstract

This article comments on an argument in favor of a change in OBM's content and focus to include certain empirical findings and theoretical constructs derived from fields like Cognitive and Social Psychology. Specifically, the argument suggests that personal beliefs such as optimism, self-efficacy, and response-efficacy are influential determinants of behavior that give rise to achievement motivation and a success-seeking typology. By incorporating such constructs into OBM, it is suggested that the field will better align itself with related disciplines sharing the goal of promoting personal success, thereby enhancing its performance-improvement toolkit and fostering greater recognition and acceptance for itself within mainstream Psychology. After summarizing key aspects of this argument, this paper identifies certain of its associated challenges and then presents some specific strategies by which the OBM community can chart a future course for the field.

Key words: OBM, I/O Psychology, Positive Psychology, reinforcement, personal beliefs, achievement motivation, success

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## ON REINVENTING OBM:

## COMMENTS REGARDING GELLER'S PROPOSALS FOR CHANGE

It has been nearly 25 years since Psychology celebrated the centennial anniversary of its beginnings as an independent scientific discipline (Hearst, 1979). Nonetheless, it is commonly accepted that Psychology is still a relatively young field, especially in relation to physical sciences such as Astronomy and Physics dating back at least to the 17<sup>th</sup> century. If Psychology is young, then even more so are its many and varied subdisciplines. For example, Industrial and Organizational Psychology (IOP) likely can be dated back only to the 1920s (Bucklin, Alvero, Dickenson, Austin & Jackson, 2000), the Experimental Analysis of Behavior to the 1930s (e.g., Skinner, 1938), Applied Behavior Analysis (ABA) probably to the 1950s (Dickinson, 2000), and Organizational Behavior Management (OBM) arguably to the 1970s (Dickinson, 2000; Johnson, Redman & Mawhinney, 2001).

In a recent special issue of *JOBM*, Ludwig (2003) suggests that, because of its present "identity crisis," OBM may be at a stage of development analogous to adolescent puberty, a stage where such crises may be commonplace. However, identity crisis or not, we think OBM actually may be closer to its infancy than to its adolescence. Of course, the problem is that we lack an accepted metric, like dog-years, by which to gauge how disciplines age in comparison to one another or to humans. If one were to formulate a "discipline-years" rubric to encapsulate the relative slowness with which fields of study mature in relation to people, then an arbitrary (but not unreasonable for the span of human experience) ratio of, say, 25:1 might be in order. By such a standard, even our eldest brethren within the physical sciences would be little more than "teenagers" in the

history of ideas, Experimental Psychology would not yet have reached the “age of reason,” Behavior Analysis would be a toddler, and OBM clearly still would be in “diapers.” Nonetheless, even if OBM’s puberty has not yet arrived, speculations about what it should become when it “grows up” certainly are not inappropriate.

Along these lines, a provocative pair of articles (Geller 2003; Weigand and Geller, in press) has challenged the OBM community to consider how its field might be “reinvented.” In the first article, Geller (2003) suggested that a make-over of OBM might be structured along the lines of becoming more like IOP, a subdiscipline that he notes has gained considerable acceptance and popularity within mainstream Psychology. In a sequel article, Weigand and Geller (in press) identify yet additional developments, like the emerging field of “Positive Psychology” and renewed interest in the area of “achievement motivation,” as being movements with which OBM might share a productive alignment toward enhancing its performance-improvement toolkit and fostering greater recognition and acceptance for itself within mainstream Psychology.

While much is laudable about Geller’s vision of OBM’s future self, there are risks associated with his proposed reinvention strategies. These risks arise chiefly from the challenges posed by emulating other sibling fields of Psychology in ways that do not repeat past philosophical or conceptual mistakes and also do not ignore, abandon, or renounce important aspects of OBM’s ancestral lineage. This paper contributes to the important ongoing discussion of OBM’s future with a three-part effort to summarize the reinvention “opportunity” sketched by Geller, identify certain of its associated challenges, and consider some specific strategies by which to move the field ahead.

### Geller's View of OBM's "Opportunity"

Since Geller's proposals for reinventing OBM build across two different articles (Geller, 2003; Weigand & Geller, in press), it is useful for purposes of communal discussion to summarize them in one place, even at the risk of being redundant. Our summary, then, will briefly consider the context, desired outcomes, and dimensions of change encapsulated by these proposals.

#### *The Context for Change*

Three important factors provide a backdrop for Geller's recommendations about how OBM should change as a means of moving forward. It is important to be aware of these factors in considering his proposals.

*Research areas.* For a number of years, Geller has been involved in very important behavioral research on topics of safety, health, and environmental protection (e.g., Geller, 1981, 1996). The settings for this work highlight the critical importance of response maintenance and generalization in OBM research. As Weigand & Geller (in press) have noted, changing behavior is only half the battle; keeping it changed is the other half. The importance of lasting change is nowhere more salient than in an area like safety research where even a single lapse in appropriate behavior can have devastating personal and organizational consequences. Moreover, the problems of maintenance can be compounded in the particular areas Geller has worked because the targeted behaviors (e.g., buckling up) often occur in semi-private contexts free of any regular supervision or witness. This leads researchers to be especially keen on finding ways to ensure that targeted safety-, health-, or environment-related behaviors will persevere even when observers, coaches, or even explicit contingencies of reinforcement are not present to

support these actions. This concern also has prompted researchers to recruit others (family, friends, peers, or colleagues) who occasionally might be present to assist in the maintenance of important behaviors.

These concerns about response maintenance certainly are not unique just to OBM researchers working in the areas of safety, health, and the environment. As Baer, Wolf, and Risley (1969) noted, the “generality” (i.e., durability) of behavior change should be of prime interest to all who conduct ABA research. Likewise, challenges to response maintenance posed by relatively isolated performance contexts also exist in other areas. We have experienced them in our own research in more traditional organizational settings (e.g., managerial, sales) where employees are mobile and often work in places not amenable to direct observation. Nonetheless, such concerns are one important setting condition for Geller’s proposals about OBM’s future.

*Relative success of IOP.* Another important contextual factor is Geller’s (2003) view that IOP currently enjoys a much more prominent and popular position within mainstream psychology than does OBM. Whereas IOP is well represented at the graduate level within many universities and has a large following within its own professional society (Bucklin et al., 2000), OBM exists as a specialty in only a handful of universities and remains a somewhat obscure component of the ABA movement. Geller (2003) also notes that graduate enrollments in IOP are comparable to those of clinical programs, and they appear to be growing in popularity in terms of applications received. In contrast, OBM programs have much smaller graduate enrollments that may be static or even declining in size.

Geller (2003) suggests that these differences in popularity can be traced in part to methodological and conceptual distinctions between OBM and IOP. In terms of methodology, Geller notes that IOP has tended to employ more assessment-oriented, laboratory-based approaches to its subject matter coupled with the use of various statistical analysis procedures, while OBM has employed more field-based behavioral methods characteristic of the ABA tradition (cf. Bucklin et al., 2000). On a conceptual level, Geller suggests that IOP is much more eclectic than OBM, drawing on empirical and theoretical work in many different subdisciplines of Psychology. Among these, IOP has been heavily influenced by Cognitive Psychology (Bucklin et al., 2000), which has led it to incorporate a variety of constructs dealing with intra-personal states. As a result of these differences, Geller believes researchers, prospective students, and members of the broader psychological community may view IOP as a more interesting and viable field than OBM even though the common goals of both disciplines are improvement of work performance and enhancement of organizational success.

Weigand & Geller (in press) reference the emerging field of “Positive Psychology,” a movement purportedly dedicated to improving personal life quality by understanding and harnessing such positive human characteristics as hope, wisdom, and courage (Seligman & Csikzentmihalyi, 2000). As Weigand and Geller (in press) note, “Positive Psychology” appears to be a burgeoning field of sufficient interest to the American Psychological Assn. (APA) to warrant a special issue (2000, v. 55) of their flagship journal, *The American Psychologist*. Along with OBM and ABA, “Positive Psychology” shares the ultimate goal of improving the human condition.

*Two instances of neglect.* Geller further cites two instances of apparent neglect as important contextual factors contributing factors to the need to rethink OBM's future. One form of neglect stems from the fact that APA seems to have overlooked what should be key roles for ABA and OBM in their "Decade of Behavior: 2000-2010" campaign (Geller 2003). A second is the lack of acknowledgement in the literature on "Positive Psychology" of the fact that behavioral principles, such positive reinforcement, represent highly effective and *positive* ways to improve the quality of life at work and elsewhere (Weigand & Geller, in press).

Geller interprets these instances of neglect as a reflection of the relative obscurity to which OBM and ABA have been relegated, compared to IOP and "Positive Psychology," and believes they are strongly indicative of a lack of credibility and interest on the part of the larger psychological community as well by faculty and prospective students. Therefore, as his argument goes, unless something is done to address this imbalance, OBM will not flourish and may not even survive. Accordingly, within this general context, Geller believes that certain changes to the field will enable OBM to achieve several key outcomes.

#### *Desired Outcomes of Change*

Geller (2003) and Weigand and Geller (in press) suggest that by changing in the ways described below, OBM (and by extension ABA) will realize several desirable outcomes. First, its image and credibility within mainstream Psychology will improve. No longer will OBM be ignored by the greater psychological community or relegated to a minor position within IOP, as the present second author's review of relevant textbooks

suggests it is. Instead it will be recognized as a field with important and successful methods for improving the human condition in very important ways.

Second, and related to its improved credibility, OBM will become a much more interesting field that will attract more faculty advocates and more prospective students. In turn, this will ensure that OBM is better represented in university curricula and will generate bigger graduate enrollments and more applicants.

Third, OBM will forge better relationships with other subdisciplines of Psychology (e.g., Social and Cognitive Psychology, IOP, and “Positive Psychology”) that are sympathetic to the goal of improving the human condition. This better integration of OBM with related fields will allow it to draw on other bodies of empirical and theoretical work so as to enhance its understanding of work behavior, thereby enabling OBM to “avoid reinventing wheels.”

Fourth, by achieving a better integration of knowledge in related fields, OBM will fashion more effective interventions. As a result, OBM may become better at promoting behavior change, better at sustaining that change, and better at getting lasting changes to spread to other relevant situations and actions. Of course, this will benefit all areas of OBM research, but especially those areas where self-directed changes appear of paramount importance.

#### *Dimensions of Change*

Taken together, the proposals offered by Geller (2003) and Weigand and Geller (in press) call for certain fundamental changes or extensions in OBM’s understanding of itself as well as in its strategies and tactics for altering and sustaining behavior. The

major categories of change or extension recommended by these authors are described in this section with reference to the pages in their articles where these matters are discussed.

*Mindfulness.* OBM should not be content merely with changing what people do or say (i.e., their overt behavior). Instead, in most instances, OBM would be better served by enhancing “mindful fluency” as a component of producing behavior change (Geller, 2003, p. 9). Mindful fluency occurs when people do not engage in “unthinking acts,” but rather are consciously aware of (i.e., engage in self-talk about) what they are doing, before, during, and after they do it. Geller (2003) cites several benefits of “mindfulness” including its facilitative effects on vigilance (i.e., observing the behavior of self and others), generalization, and positive self-talk. All of this, in turn, can promote “active caring,” which occurs when people assume responsibility for their own behavior and that of others (Geller, 2003, p. 10).

*Personal beliefs.* OBM’s strategies and tactics also should be guided by a better understanding of the role of certain “personal beliefs” in the control of behavior. Described by Geller (2003, p.20) as “analogous to ‘establishing operations’ (Michael, 1982) and rule-governed behavior (Malott, 1992, 2001),” he further asserts that personal beliefs are states that affect one’s “propensity to perform in certain ways.” (Geller, 2003, p. 21). Drawing on the suggestions of Bandura (1997), Atkinson (1957) and others, along with his own work, Geller identifies a number of personal beliefs that are important contributors to the realization of “mindful fluency” and “active caring.” Included among these beliefs are self-efficacy, which refers to a person’s conviction that s/he can in fact do what is required to reach a certain goal; response-efficacy, or a person’s perception that specific behaviors or strategies, if enacted, will in fact produce desired outcomes;

self-esteem, a person's view that s/he is valuable; personal control, a belief that one is in control in a certain situation; and optimism, or a person's expectation that good things will happen (Geller, 2003, pp. 17-20). Geller indicates that these personal beliefs are not intractable, but are subject to modification by environmental conditions such as antecedents and consequences (Geller, 2003, p. 20).

*Success-seeking.* Building on the notions of mindful fluency and personal beliefs, Weigand and Geller (in press, p. 3) argue that ABA and OBM should do more “to promote a success-seeking orientation within organizations and educational institutions.” These authors describe “success-seeking” as an achievement typology characterized by a constellation of personal beliefs including high optimism, high self-efficacy, high personal control, and low fear of failure. In contrast to the type of individuals described by Malott (2003), who perhaps by virtue of a certain style of upbringing are driven by fear, guilt and shame, success-seekers seem motivated primarily by positive reinforcement (Weigand & Geller, in press, p. 15). Like personal beliefs, success-seeking is a personal state that can be instilled or enhanced by operations affecting its underlying components, like optimism and self-efficacy (Weigand and Geller, in press, p. 15).

*Self management.* As noted, Geller believes an important goal for OBM should be to enhance the capability of its interventions to achieve lasting behavior change, especially in circumstances relatively isolated from external management and supervision. To accomplish this, he believes it is necessary to harness the power of covert determinants of behavior. The self talk associated with “mindful fluency” is one such determinant (Geller, 2003, p. 12). By using this talk as a means of “self

persuasion,” one in effect bolsters relevant personal beliefs and internalizes a sense of personal responsibility with respect to certain overt behaviors. This then leads to a transition in the control of that behavior from other- to self-directed, a condition described as crucial to long-term maintenance (Geller, 2003, pp.12-13).

*Cognitive and affective consequences of positive reinforcement.* The enhanced focus on personal states and self-directed behavior that Geller recommends be developed within OBM is consistent with the cognitive and affective consequences of positive reinforcement he identifies. Geller (2003) indicates that social reinforcement does not exert its effects only on the behavior producing it. In addition, apart from its behavioral consequences, such reinforcement can enhance both affective states and personal beliefs (Geller, 2003, p. 8). That is, people experiencing recognition or positive feedback may come to feel better about themselves (affective results) and/or get a “boost” in personal beliefs like self-esteem, self-efficacy, or optimism (cognitive results). Geller indicates it is important to understand these affective and cognitive consequences of reinforcement for two reasons (Geller 2003, p. 8). One is that internal effects of reinforcement may occur even if direct strengthening of the overt instrumental response does not. A second is that reinforcement can exert an indirect influence on overt behavior by means of its positive effects on personal beliefs. Examples of this indirect effect include the tendency for reinforcement to enhance “active caring” (Geller, 2000, p. 9), promote success-seeking (Weigand & Geller, in press, p. 23), and induce people to view setbacks as opportunities instead of failures (Weigand & Geller, in press, p. 19).

*Expanded role of OBM in personal and organizational change.* The changes in OBM associated with Geller’s proposed focus on the above-noted cognitive and affective

personal states would seem to move the field in a somewhat different direction than it might otherwise head, with respect to understanding and producing personal and organizational change. In addition to its traditional role in addressing behaviors related to productivity, quality, health, and safety, OBM's expanded mission, were it to evolve in the way Geller suggests, would include developing the wherewithal to (a) increase positive personal states and decrease negative ones so as to enhance employee satisfaction and happiness, and (b) promote a success-seeking orientation among those in the workplace (Weigand & Geller, in press, p. 15).

#### Issues related to OBM's "Opportunity"

A self-evident tenet of change is that, in becoming different, you can't stay the same. Becoming different often involves crossing over old boundary lines into new territory, usually for purposes of annexation. So, some questions of importance for the OBM community in light of Geller's proposals for reinvention are these: Does OBM really want to change from what it is now in order to become more like what Geller envisions it should be? If so, does it really want to annex the "new territory" he describes as the basis of this change? What kind of field will OBM become if it does? Will OBM be more successful as a result of such changes?

Our purpose in this section is not so much to provide answers to these queries as it is to highlight certain related issues that should be considered as part of the ultimate decision process leading to a conclusion about how OBM should evolve. In the end, of course, answers must emerge from a consensus of the OBM community itself. What follows is a preliminary list of issues raised by Geller's proposals, as we see them, along

with additional factors we think should be considered in charting the future course of OBM. We do not pretend to offer an exhaustive list, and we are confident additional relevant issues will emerge in the pages of this journal as Geller's proposals for change are given the careful consideration they are due. The issues we identify here can be categorized as relating either to the context for his proposals, or the specific dimensions of change Geller recommends.

### *Context Issues*

#### *The present boundaries of OBM*

OBM's present territorial markings can be viewed from several perspectives. One is to emphasize its roots in ABA and to argue that it is merely a special case of that more general approach. Adapting the definition of ABA provided by Cooper, Heron, & Heward (1987) for the purpose of describing OBM in this way, we could say it is "the science in which procedures derived from the principles of behavior are systematically applied to modify the actions *of employees in work settings* to a meaningful degree and to demonstrate experimentally that the procedures employed were responsible for the targeted behavior change" (p. 14, modifications from the original are italicized). This definition seems to cover all of the key ingredients of ABA specified by Baer et al., (1968), except possibly for his "generality" component. The focus on (presumably overt) behavior in this definition is consistent with the traditions of ABA inherited from the Experimental Analysis of Behavior movement (Skinner 1953; 1987).

Other views of OBM, less strictly bound to ABA traditions, have been proposed. For example, in a recent chapter, Johnson, Redmon, & Mawhinney (2001) acknowledge a foundational linkage with the parent discipline of ABA, but identify other important

historical influences on OBM from figures like Lewin, Tolman, Bandura, and McGregor (whose most influential writing was heavily influenced by Maslow). Johnson et al. (2001) note that “This historical backdrop should help readers understand why OBM cannot be described by reference to a single source even though behavior analysis as the behaviorists’ science of behavior can be recognized as the fundamental scientific discipline from which the discipline we call OBM has evolved (p. 4).” As evidence that OBM may already be something of a “melting pot,” Johnson et al. (2001) point to the discipline’s embrace of more traditional IOP concepts such as feedback and goal setting, notions no doubt embellished by the influences of Cognitive Psychology on this field. In the end, Johnson et al. (2001) suggest their reading of the field indicates that the diversity of topics within OBM in recent years, ranging from molar reconceptualizations of organizations to issues related to organizational culture, demand a broader delineation of the discipline than would occur with strict adherence to ABA traditions.

Several observations about the Johnson et al. (2001) view of OBM are noteworthy. First, they appear to have adumbrated Geller’s (2003) call for content expansion by indicating that OBM already is an eclectic field, one that perhaps is more like IOP than seems apparent to many. Johnson et al. (2001) clearly document that many of the issues permeating the field of IOP also are being addressed in various ways within OBM as well. Second, in their treatment of goal setting and feedback mechanisms, Johnson et al. (2001) seem to refrain carefully from the use of cognitive theorizing. This practice suggests that, however eclectic they believe OBM to be, these authors are not yet ready to annex all of the new intra-personal territory staked out by Geller. Finally, by enumerating the broad list of topics currently addressed by OBM, it could be argued that

Johnson et al. (2001) have identified content, instead of philosophical or even methodological, differences between OBM and ABA. If so, then their view of OBM would be reasonably consistent with the above definition adapted from Cooper et al., (1987). Moreover, like Anderson and Crowell (2003), Johnson et al. (2001) appear to be calling for a more thorough analysis of the variables underlying major OBM interventions, rather than for the addition of cognitive theorizing to the field.

In some ways, the view of OBM proposed by Johnson et al. (2001) is reminiscent of an earlier conception of OBM we proposed (Crowell & Anderson, 1982a). In describing OBM, we said it is "... first and foremost, a means to develop and refine efficient and effective methods for realizing the potential of human resources. It is, in its most fundamental sense, a framework within which our understanding of the factors that lead to effective management can be clarified and extended (p. 3)." Critical components of this framework, in our view, involved the commitment to scientific discovery, founded as it is upon the platforms of empiricism and objectivity, and guided by the need to establish the validity of its procedures and findings. Upon reviewing these components in some detail, we concluded that OBM was an "external" approach to inquiry within organizations amenable to the discovery of any factors influential in affecting workplace performance. Of this approach, we said it is "...a concern for the means by which *any* potentially significant agent can be shown to have a "real" influence on behavior in the work setting. From this perspective, the features of empiricism, objectivity, and validity are the only relevant criteria (Crowell & Anderson, 1982a, p. 27)." This characterization of OBM, too, is broadening for it underscores how method takes precedence over content in defining OBM (see Mawhinney, 2000 for a similar view). Therefore, like the view

offered by Johnson et al. (2001), our position admits to the possibility of an eclectic account of the factors influencing employee behavior. However, the emphasis we placed on objectivity and validity demands that OBM at least remain true to its scientific foundations.

*Additional factors possibly related to any neglect or unpopularity of OBM*

If instances of apparent neglect and unpopularity are outcomes in need of remedy and if they provide a rationale for reinventing OBM, then it is prudent to ask whether or not other factors beyond those considered by Geller might have contributed to these circumstances. Clearly, such factors also would need to be addressed or at least taken into account in any comprehensive strategy designed to improve OBM's image and standing within mainstream Psychology. We can think of several additional factors that might be relevant here.

*Youth.* Discipline years probably should be considered in comparing OBM with IOP. As noted above, OBM truly is very young field. It is roughly half as old as IOP (Bucklin et al., 2000). Really young disciplines have had less time to become established and entrenched within the academic fabric as well as less time to earn credibility and respect. It would be interesting to compare the relative popularity and credibility of OBM today with that of IOP at the same stage of its development. But, even age difference, per se, is not a fair yardstick by which to evaluate the relative growth of these two disciplines. Much happened (e.g., World Wars) that accelerated the early development of IOP (Bucklin et al., 2000) for which there is no counterpart in OBM's history.

*De-emphasis on theory.* While ABA and OBM are perhaps not atheoretical disciplines (Michael, 1993), it seems clear that the role of theoretical constructs and the pace of active theory development is much different in these fields than in other subdisciplines of psychology. Moreover, it seems to us that a consensus has yet to emerge within the OBM community on the value and utility of regarding its principles of behavior as an “empirical theory” (Hopkins, 1999). In large part, any de-emphasis on theory in OBM is likely a carryover of Skinner’s influence (e.g., Skinner, 1950) on ABA and OBM (Dickinson, 2000). In our view, it is quite possible that a relative lack of theoretical emphasis might be a contributing factor to a possible perception that ABA and OBM are “substantively challenged” in relation to other subdisciplines of Psychology whose self-proclaimed superiority lies in their dedication to theory building and theory testing.

*Technological bent.* Along with a de-emphasis on theory, ABA and OBM may suffer from the perception that they are technologically bent (Geller, 1991), being fields more like engineering than science. Gilbert’s (1978) widely-used concept of “performance engineering” certainly has the potential of contributing to this perception within uninformed audiences. Once again, such a characterization, fair or not, could be demeaning to ABA and OBM to the extent that engineering disciplines are looked upon as those that merely use extant knowledge to implement solutions, in contrast to “truly” scientific disciplines dedicated to discovery of new knowledge.

*The nature of OBM research.* Anyone who has conducted research in both laboratory and field settings knows that the latter can pose unique challenges that often (a) prolong the course of projects significantly compared to the timeframe typical of lab

investigations, and (b) involve obstacles that can jeopardize either a project's completion, the interpretation of its results, or both. This means a discipline that lives by real-world applications and demonstrations, as does OBM (Bucklin, et al., 2000), is not one to which hoards of young academic researchers will flock, especially considering the pressures related to tenure expectations and the difficulties associated with finding and securing suitable organizational or field settings in the first place. This, in turn, very likely affects student enrollments and interest.

### *Dimensions of Change Issues*

Issues arise not just in relation to the context for Geller's reinvention proposals, but also in regard to the specific dimensions he suggests for change. Here we will identify some of those related to the proposed cognitive and motivational orientations Geller recommends for OBM.

### *OBM as a "cognitive science"*

One needs little more than a moment's reflection to reveal that we humans are thinking and feeling, as well as behaving, organisms. The historical problem for Psychology has been how to reconcile all three of these dimensions in an account of human nature that is amenable to scientific discovery and explanation. Much has been written on the differing viewpoints in this matter (see Baum, 1994) that need not be rehashed here. Suffice it to say that prominent among OBM's historical influences has been a perspective on thinking and feeling inherited from ABA (Crowell & Anderson, 1982a; Dickinson, 2000), which in turn derives from Skinner's conception of "radical behaviorism" (Skinner, 1974).

We think it fair to say that Geller's proposed path for OBM, involving as it does a greatly increased emphasis on cognitive and affective constructs, while possibly not diametrically opposed to radical behaviorism, is at least a sharp turn in its road. While space precludes a detailed analysis, highlighted below are several potential difficulties associated with a movement toward making OBM into a "cognitive science."

*Occam's razor.* Parsimony is an important attribute of scientific explanations (Marx, 1976). Given two alternative accounts of some phenomenon, the so-called "law of parsimony" dictates that the one with the fewest explanatory components is generally preferred. The use of "Occam's razor" refers to the practice in science of achieving simplicity through cutting away or shaving off unnecessary "hypothetical" constructs from explanations of phenomena. In psychology, Occam's razor would be used as a guide to simplify overly complex behavioral explanations or to eliminate unneeded elements from such explanations.

The explanatory concept of "learned helplessness" (e.g., Maier & Seligman, 1976), cited by Geller (2003), could be viewed as an example of how parsimony can be sacrificed when explanations of behavior become heavily focused on the mental processes. Briefly, the idea behind this theory is that when an organism is exposed to prolonged periods of uncontrollable aversive stimulation, like inescapable shock, it learns it can do nothing to control the trauma. Therefore, it is said to acquire a "helplessness" belief, quite opposite in nature to the personal state of self-efficacy, characterized by the tendency to "give up" in the face of future noxious events. According to proponents of this theory, the "helplessness" belief and its attendant "giving up" explain why organisms

fail to learn in subsequent situations, like avoidance training, where active responding would terminate or prevent the occurrence of shock.

This mentalistic explanation of how exposure to inescapable shock interferes with subsequent avoidance learning can be contrasted with an alternative view suggesting that during inescapable shock the animal does not acquire a belief, but rather acquires certain defensive postures involving immobility that are reinforced because they mitigate shock intensity (Crowell et al., 1977; Anderson et al., 1979). By this view, these learned postural behaviors generalize to the subsequent avoidance situation where they compete with the required avoidance response, thereby retarding its development. From the standpoint of parsimony, some have argued (e.g., Crowell et al., 1977; Anderson et al., 1979) that it is not necessary to posit complex cognitive states in animals to account for this phenomenon when simpler behavioral explanations based on known principles of reinforcement will suffice (Anderson, Crowell, DePaul, & McEachin, 1997). Likewise, if OBM's behavioral focus thus far has kept its explanations of work behavior more toward the parsimonious end of the scale, there is a distinct danger of moving in the opposite direction through a widespread acceptance of mentalistic concepts borrowed from Cognitive and Social psychology.

*Concepts in science.* Concepts are fundamental to science. They refer to actual or hypothesized properties of objects or organisms. Empirical laws are just expressions of systematic relations among two or more concepts pertaining to stimuli, responses, or states of the organism (Spence, 1956; Brodbeck, 1963). All too often, concepts are introduced and used in ways that severely limit their utility, particularly when those concepts refer to attributes existing in the "world within the skin" (Skinner, 1974). As

Johnston and Pennypacker (1993, p. 3) note, “because this mental universe is not bound by any physical laws, it is especially troublesome. It provides an endless source of theories about and explanations for behavior that cannot ultimately be falsified.” Since “falsification” is a key element of the scientific method (Popper, 1968) as well as (presumably) of the “analytical” criterion proposed by Baer et al. (1968), ABA in general and OBM in particular have eschewed mentalistic accounts. Brodbeck (1963) has presented a cogent and still relevant analysis of how concepts can be introduced and used in a manner that maximizes their utility in behavioral science. We invite members of the OBM community to revisit this analysis as they contemplate Geller’s suggested direction for this discipline.

One particularly problematic use of concepts, especially those used in explanations of behavior, is known as the “explanatory fiction” (Baum, 1994; Michael, 1993). Explanatory fictions occur when a concept used to explain behavior is defined by the very behavior it purports to explain. To cite a trivial example, the presence of the affective state of “happiness” (a concept) could be operationally defined by (i.e., inferred from) the observation that someone smiles. It would then be an explanatory fiction to account for smiles by suggesting they were caused by happiness. Unless one is careful about the introduction and use of terms (cf. Brodbeck, 1963), explanations of behavior based on personal beliefs or other attributes within the skin easily could become explanatory fictions. In large part, this very problem is why Skinner looked elsewhere (outside the skin) for the causes of behavior (Skinner, 1987).

Yet another logical problem associated with the use of concepts is what Ryle (1949) called the “para-mechanical hypothesis” (cf. Baum, 1994). This problem occurs

when category labels (i.e., concepts) take on a life of their own separate from the behaviors used as concept indicators. For instance, once the label “success-seeking” is applied to a particular constellation of behaviors (i.e., the defining indicators), it can happen that the label is then thought to reflect something more, some additional essence or inner property that Ryle (1949) referred to as “the ghost in the machine.” In reality, the category label is merely a shorthand notation for the constellation of behaviors it signifies, nothing more (cf., Brodbeck, 1963). Again, unless care is taken, a science of work performance based on personal beliefs or other inner states could fall victim to this problem.

*What causes what?* A final issue related to Geller’s cognitive perspective pertains to the age-old, yet unresolved, matter of how internal states relate to overt behavior. Do cognitive and affective states cause overt behavior, are they by-products of overt behavior, or are both independent concomitants of yet other factors? Unfortunately, the empirical literature doesn’t really help us resolve this question. While there is, as Geller (2003) points out, considerable evidence that self reports of certain personal beliefs, like self-efficacy, are positively correlated with employee performance (e.g., Bandura & Cervone, 1983, 1986), the work of Cole and Hopkins (1995) indicates that this correlation can be increased or decreased by factors that affect reported self-efficacy separately from performance. This finding does little to support the possibility of a causal (or even facilitative) link between self efficacy and action. Moreover, as Brown (1979) notes, the earlier extensive review of Nisbett and Wilson (1977) on the accuracy of self reports of personal cognitive and motivational states led them to conclude that their findings “confound any assumption that conscious, verbal, cognitive processes

result in conscious verbal changes in evaluations or motive states which then mediate changed behaviors (p. 235).”

Irrespective of its empirical support, or lack thereof, Geller’s (2003) position on the relation between cognition and behavior is fairly clear: Cognitive activity like self-talk can direct behavior (p. 12) and personal beliefs can increase the “propensity of” overt action (p. 21). However, the mechanism by which this occurs remains unclear. Implicit in this view, as well as older cognitive accounts of behavior (e.g., Tolman, 1932), is the notion that action unfolds somehow according to a kind of “cognitive syllogism.” Such a syllogism might look like this:

*I expect and want good things to happen.* (i.e., optimism and motive)

*I know a behavior that will produce good things.* (i.e., response efficacy)

*Therefore, I engage in that behavior.* (i.e., overt action)

Unfortunately, this syllogism does little more than skirt the problem of how the gap between “knowing” and “doing” is bridged. We are reminded here of Guthrie’s (1952) comment about Tolman’s cognitive theorizing. Without a clear linkage between cognitions and action, organisms can become “buried in thought” at choice points. In a similar vein, we are concerned that that Geller’s proposed direction for OBM may lead to the point where work behavior is obscured amidst personal beliefs.

#### *OBM as a science of motives*

As noted above, Geller’s reinvention proposals stake out some potentially new territory for OBM, not all of which is related to cognition and personal beliefs. The emphasis placed on achievement and success-seeking by Weigand and Geller (in press) suggests, in effect, that OBM also should annex some ground traditionally belonging to

the field of motivation. But, in doing so, OBM likely will accede to at least some of the conceptual baggage carried by constructs borrowed from motivational theorizing.

Moreover, the appeal to inner motives in the control of behavior is fraught with many of the same challenges noted above in connection with cognitive states and personal beliefs.

As Brown (1979) has noted, interest in motivational concepts has a “long past, but a short history.” The idea of motivation is a notion that roughly equates to the ancient interest in understanding why organisms do what they do, or what “lies beneath” (i.e., gives rise to) behavior. However, the scientific study of this topic dates back only about as far as IOP (to the 1920’s; see Brown, 1979). Contemporary interest in motivation has revolved around the idea that it serves as a source of energy for behavior. Motivational constructs commonly are invoked as explanations when behavior is observed to vary across times or situations in ways that cannot be attributed readily to other factors like learning, especially when the observed variations are precipitous or disproportionate to the initiating conditions (Brown, 1961). Motives have been variously described by different theorists as influences that “energize,” “drive,” or “pull” behavior.

Over the years, many conceptual and theoretical issues have been raised in connection with motivational concepts including the question of whether or not they are useful at all (Brown, 1961; 1979). Thus far, owing to its lineage, OBM has escaped much of this concern since there is little room for the notion of “motives” in a Skinnerian functional analysis of behavior, except perhaps within the category of Establishing Operations (Skinner, 1953). Clearly, however, Geller’s envisioned- future for OBM brings with it significant focus not just on personal beliefs but also on presumed motivational states like “fear of failure” or “desire for success.” Once OBM admits such

constructs into its science, it may also open the door to a legacy of other controversies and unresolved issues attendant to motivational theorizing. The current debate between Malott (2003) and Geller (see Weigand and Geller, in press) related to the “Jewish mother syndrome” is a good case in point.

*The Jewish mother revisited.* From a motivational perspective, this controversy is really more about the nature of so-called “acquired drives” than it is about the use of negative reinforcement. A question of long-standing interest in the field of motivation has been: How do organisms develop what appear to be drives or needs for such factors as power, prestige, success, or money? People who appear to be thusly “motivated” are thought to have acquired these drives or needs as a result of experience (Brown, 1961). That such motives are learned seems a reasonable conclusion given that goals like power, success, or money are not linked directly to any innate biological needs. The conceptual problems posed by the notion of “acquired drives” have been aptly characterized by Brown (1961). In essence, these problems boil down to “questions of how, and to what extent, the variables that govern the learning of one response function as though they were motivational variables when that response is interacting with other responses” (Brown, 1961, p. 140). In other words, how does what an organism learns enable a goal object such as success or money to “motivate” the diverse collection of actions that may be said to represent “seeking” that goal.

Various motivational explanations of so-called “goal-seeking” or “purposive” behavior (Tolman, 1932) abound. The common explanatory problem here for all theorists has been this: How can an event yet to occur in the future (i.e., a goal not yet achieved) “motivate” behavior in the present? To avoid teleological accounts founded on

the untenable premise that effects can antedate their causes, it has been necessary for theorists in this tradition to posit that some kind of previously learned reaction is functioning during the course of goal-seeking behavior to energize, guide, and or reinforce it. At the risk of great oversimplification, there have been two primary schools of thought on the nature of the learned reaction(s) that might “motivate” goal-seeking behavior. Of course, Skinner opted out of this controversy altogether by avoiding unnecessary theorizing of this kind (Skinner, 1950) and by shifting the explanatory emphasis for “purposive” behavior to “selection by consequences” (Skinner, 1981).

In the traditions of Tolman (1932) and Lewin (1936), positions with which Geller’s proposed new cognitive and motivational territory for OBM seems quite congruent, explanations of goal-seeking behavior were based on learned “cognitive maps,” “expectancies,” or “topological” factors combined with objects having appropriate “demand” or “valence” properties. Roughly speaking, by these views, purposive behavior unfolded according to the “cognitive syllogism” noted above. That is, if an organism knew where a goal was (i.e., had a “cognitive map”), knew how they could get there (i.e., had a “means-ends readiness” expectancy), and really wanted the goal object (i.e., had the demand), then goal-seeking behavior would occur. For Tolman (1932), maps, expectancies, and demands all were, at least to some extent, the products of previous learning.

In the other camp on this matter were the traditions of Hull (1943, 1952) and Spence (1956; 1958) in which anticipation of a desired goal object was thought to be a learned response capable of both guiding and energizing behaviors leading to it. Unlike Tolman, however, Hull and Spence viewed the anticipatory goal reaction as being

affective rather than cognitive in nature (Brown, 1961). One reason for this view was a commitment by these theorists to the position that “motivating” agents are arousing, not palliative. This notion was consistent with the central idea espoused by Hull (though not Spence) that drive- or tension- reduction was the mechanism underlying the reinforcement of learned responses. Acquired motives were therefore thought to be drive-inducing states based on the anticipation of either positive or negative goal objects. Accordingly, whether one was driven toward success, power or money, or away from pain or displeasure, the underlying condition was believed to be one of increased tension that could be mitigated, at least partially, by obtaining the object of desire. Malott’s (2003) description of the “Jewish mother syndrome” is consistent with this general position on acquired motives, as is Brown’s (1961) analysis of the drive for money. Interestingly, Brown also extended this same type of analysis to account for the apparent motivating effects of “self-talk” (Brown, 1961, p. 182). As Brown’s analysis implies, in the normal course of socialization, with or without Jewish mothers, people may learn to feel uncomfortable in the presence or absence of a great many things. It is very likely that, faced with such disquiet, people will engage in a variety of behaviors, some of which may be labeled as “altruistic,” “caring,” or “positive,” simply because those actions are instrumental in reducing their discomfort (cf. Dollard & Miller, 1950).

*In search of success.* The pioneering work of McClelland and Atkinson on achievement motivation (Atkinson, 1964; McClelland, Atkinson, Clark & Lowell, 1953) certainly has been important and influential in stimulating further research (Brown, 1979). We are grateful to Weigand and Geller for reminding the OBM community of these efforts and for highlighting their potential relevance to this field. There is little

doubt, as Weigand and Geller (in press) note, that understanding and facilitating personal achievement and success is a goal fully compatible with the mission of OBM. In pursuing that worthy goal, it seems imperative to remain guided by the one “bottom-line” principle we view as the cornerstone of OBM’s somewhat unique place among disciplines devoted to the workplace: namely, that no matter how people think or what they believe, their success is defined by overt behavior (Crowell, 1998).

We are concerned that the more OBM becomes preoccupied with motivational (or cognitive) factors in the “world within the skin,” the more chance there is to lose focus on the true bottom line. One of several reasons why OBM already is a “Positive Psychology” is because it has thwarted the usual controversies surrounding “inner man” conceptions by objectifying the worker and his or her contributions to organizational success. In so doing, the many sources of disagreement and bias resulting from focus on covert personal states (i.e., the “inner” person) have been discarded (Crowell & Anderson, 1982a). Reinventing OBM along the lines proposed by Geller (2003) and Weigand and Geller (in press) clearly seems to re-open doors to these controversies.

The notion of an academic “success-seeking typology” as described by Weigand and Geller (in press) is both promising and troubling in this regard. It is promising because it implies that a unique collection of overt behaviors may exist that are correlated with (and perhaps causally related to) academic success. If true, then the specific overt behaviors associated with the success-seeking typology would constitute a desired behavioral profile useful in devising appropriate interventions to instill such behaviors in those who are less academically fortunate. In effect, the typology would provide a behavioral targeting algorithm for academic improvement. The present first author has

undertaken a project with similar purposes in the sales area by identifying through observation the behaviors differentiating high- and low-performing sales people. The resulting behavioral profile of sales success promises to be useful from the standpoint of both development and selection. Also, this general approach represents a form of “empirical targeting” that can supplement or even replace, in some instances, the hierarchical targeting process we described elsewhere (Anderson & Crowell, 1982b). A more detailed description of this project is in preparation.

The troublesome aspect of the success-seeking typology described by Weigand and Geller is its focus on covert personal states, rather than overt behaviors, along with its attendant susceptibility to the “para-mechanical” problem described earlier. We fear that this focus on personal states will diffuse, if not deflect, efforts to identify the real bottom line in academic success: namely, what successful students do differently than those who are less successful. Without this information, the typology is useless from an improvement standpoint; with this information, we wonder about the superfluity of the typology itself.

#### *Improving OBM's interventions*

Putting aside the worthy prospect of OBM's ascension to its “rightful place” in mainstream Psychology, along side IOP and perhaps the “Positive Psychology” movement, the most compelling aspect of Geller's reinvention argument is the possibility that intervention effectiveness can be improved, especially as regards response maintenance. OBM needs, and even has been criticized for not having (Anderson & Crowell, 2003), a better understanding of the ways in which behavior can be sustained, once it is changed. This is especially critical in situations where externally-controlled

agents of change, like feedback and reinforcement procedures, cannot be maintained in perpetuity. Under such circumstances, the strategy of shifting agency control from external sources to the self, as Geller proposes, seems quite reasonable and potentially effective. However, the question of mechanism again rears its head. Is effective long-term self-management achieved by manipulating one's expectancies and beliefs, or is it accomplished, as Skinner (1974) suggests, by instilling a process of examining one's own behavior in relation to its consequences? The present first author has been involved recently in developing a coaching process around the notion of "guided self development" wherein managers help their subordinates learn how to self-analyze performance and consequences for the purpose of self-directed change (when improvement is needed) or self-administered reinforcement (when positive change or maintenance has occurred). Hopefully, a more detailed description of this process will be forthcoming in the pages of this journal.

On the more general issue of understanding OBM interventions, we would like to reiterate a concern we expressed recently (Anderson & Crowell, 2003) echoing calls made previously (e.g., Duncan & Bruwelheide, 1986; Johnson et al., 2001). As a discipline, OBM needs to be far more involved in explicating the conditions and/or mechanisms by which its "tried and true" interventions work. For example, despite many repeated demonstrations of effectiveness, feedback and goal setting are incompletely understood since there are still documented instances where they appear not to work as expected (Anderson & Crowell, 2003; Johnson et al., 2001). What OBM needs are research programs, both laboratory- and field-based, dedicated to a systematic analysis of

the variables involved in the many variations that each of these interventions has taken in published studies.

### *Conclusions*

In this paper, we have attempted to summarize the argument in favor of a change in OBM's content and focus, as presented by Geller (2003) and Weigand and Geller (in press), as well as to highlight some of the related issues. We fully expect other responses to Geller's reinvention proposals will reveal additional salient points we have omitted. In this time of contemplation, when the discipline looks to shed its diapers (or emerge from its adolescence) in route to an enhanced future self, the OBM community needs to consider carefully and discuss openly both its aspirations and the strategies and tactics appropriate for achieving them. No matter the outcome of this discussion, Geller and Weigand deserve our thanks and appreciation for precipitating this particular instance of community self reflection.

Undoubtedly, the suggestion that OBM should forge closer ties with, and learn from, other relevant subdisciplines of Psychology is a good idea, but is one that will need to be implemented carefully in a way that does not abandon or compromise OBM's historical strengths. And, along the way, it is well to remember Mawhinney's (2000) admonition that OBM should not try to be "all things to all people."

To further discussion and debate about whether or not and in what ways OBM might change going forward, we would offer the following further observations and recommendations by way of conclusion:

1. In the final analysis, whether or not OBM makes a larger footprint in the “sands” of mainstream Psychology truly depends on the overt behavior of its adherents, now and in the future.
2. If, therefore, we are talking about possibly changing the OBM community’s behavior, then it makes great sense to consider a “heal thyself” approach. OBM is, if anything, a discipline that understands something about changing behavior in organizational and community settings. Why not apply OBM’s own successful methods to this challenge?
3. As we (Crowell & Anderson, 1982b; Crowell, 1998), along with many others, have said, behavior should not be changed for the sake of change, but rather for the sake of achieving more desirable outcomes. Ultimately, it is specific desired outcomes that determine which behaviors are relevant to target for change. Thus, identifying and rank-ordering OBM’s goals or desired outcomes should be a priority for community change.
4. Conducting the commonly used Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis on the field of OBM and publishing the results are behaviors that are relevant to the goals of identifying and prioritizing desired outcomes.
5. Once desired outcomes are defined, the OBM community needs to agree on which behaviors (individual and community) are needed to achieve those outcomes.
6. Recruiting and publishing additional papers in *JOBM* like those of Geller (2003) and Weigand and Geller (in press) are behaviors that are relevant to community

discussion, as well as to the goals of enhancing community awareness of other research areas and fostering ties with them.

7. Several other behaviors also might be relevant to the goals of improving OBM's image and or credibility. These would include:
  - a. Writing papers for other mainstream APA journals, like the *American Psychologist*, to explain what OBM is and/or explore possible synergies with other fields. Skinner used this journal effectively throughout his career and published his final article there.
  - b. Incorporating more theory-building and theory-testing activities or elements into OBM research and fleshing out the implications of OBM's behavior principles as an "empirical theory."
  - c. Enumerating and publicizing the many ways in which OBM already is a "Positive Psychology."

As noted above, OBM has been and should continue to be dedicated to promoting personal and organizational success. As Geller (2003) and Weigand and Geller (in press) point out, OBM shares this worthy goal with other psychological subdisciplines. What developmental path OBM will take to better achieve this goal and forge closer ties with kindred disciplines remains to be identified. Also unknown is what history will say about whether Geller's proposals for reinvention proved to be a "booster" or a "guzzler" to OBM's developmental efforts.

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