Does Job Satisfaction Have Anything To Do With Medication Error?

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It's Nice to Be Satisfied

Employees in all industries talk about being “satisfied” with their jobs. After all, work (for most of us) is inevitable, and it seems important on the surface to be content with as many aspects of work as possible. For many, the idea of being content at work is a difficult one to grasp, while others seem to find that contentedness with little problem. Given the pursuit of satisfaction upon which many employees embark, the importance of satisfaction for work performance must be clarified. Psychology has attempted to do this for some time and we know a great deal about what satisfaction is, how it develops, and what difference it makes in the lives of employees. In this article, we will explore some of those issues, particularly how job satisfaction may impact the production and/or capture of medication errors in the pharmacy.

Satisfaction Is an Attitude

Generally speaking, the experience of satisfaction is best conceptualized as an attitude. Attitudes are complex aspects of our mental lives that summarize the beliefs, cognitions and feelings we have about a particular target. That target can be an issue (like the death penalty), a tangible object (like food), a person, and even a job. An attitude is usually formed as a function of experience with the target object, but one can also be formed based on expectations about the target object before there is any experience from which to draw. Otherwise, no one could have opinions about the death penalty unless they had personal experience with it, and those people are in the considerable minority in our society, fortunately. This is important because it means that pharmacists and technicians,
before they ever set foot in your facility, already have basic attitudes about what the job
should be like, what things it should contain, and what kind of experience it should be
overall. If those expectations should not be met for whatever reason, then dissatisfaction is
likely to result.

It is important at this early juncture to contrast satisfaction with some concepts that
might sound similar. Two typical beliefs that exist among business leaders are that 1) satisfaction is a precursor to motivation and 2) satisfaction is a prerequisite for improved
performance. Though it is beyond the scope of this article to go into great depth, the
psychological literature is quite clear that these myths drastically oversimplify the role of
satisfaction related to both motivation and performance. There are far better pathways
through which to affect motivation and performance that have nothing to do with
satisfaction. So what good is satisfaction for the workplace? Satisfaction can be connected
to a number of other useful outcomes, which we will discuss later in the article. But for
now, we just need to be clear that satisfaction is not motivation and it is not necessary for
high-quality work performance (though it can help).

**Components of Job Satisfaction**

Satisfaction, like any attitude, is made up of three core components. The first of
these is a cognitive component, which encompasses a number of parts of the attitude itself. Examples would be: beliefs, values, expectations, goals, and memories. These are the parts of the attitude that the person can most easily express verbally, since they are encoded that way. Thus, when we are asked our opinion (a question that taps attitudes) about something, we typically begin with statements like “I think...” or “I believe...” when we respond. So, when you ask your employees for satisfaction-related information, they are first providing the cognitive side of those attitudes more often than not.

The second component of an attitude is emotional and consists of the discrete emotional responses that the attitude elicits. For instance, someone with a strong attitude against the death penalty may feel disgust and anger when thinking about someone being executed or even when asked their opinion on the issue. We know that emotions can be motivational in the sense that they provide information about the attractiveness or
undesirability of particular choices or objects. Thus, the emotions attached to an attitude serve to “cement” the attitude, making it stronger and more resistant to change.

The third component of an attitude is **behavioral**, and it relates to the actions that are consistent with the attitude. It is not that the attitude **motivates** the behavior, but that the attitude provides the constraints on the behavioral choices that a individual can consider. For example, if someone is pro-environment and strongly in favor of recycling, that limits the options that one has when seeking to discard an aluminum can. If the individual tosses the can in the trash, she has behaved inconsistently with the attitude about recycling, and this can lead to psychological tension and discomfort (commonly called *dissonance*). Again, it bears repeating that other factors may motivate the individual to behave inconsistently with respect to the attitude; in such cases, the individual would simply work to rationalize the inconsistency, maintaining the integrity of the attitude and validating the out-of-place behavior. So, our recycler who threw away the can would simply rationalize the behavior, perhaps by arguing that there were no recycling bins nearby, so she had little choice this time.

Note that satisfaction need not produce motivation, or vice versa. For instance, an employee may be very satisfied with a number of aspects of work, but be motivated to do very little if they feel that their position in the organization is safe and secure. Also, an employee may be very dissatisfied with work, but very motivated to perform due to external incentives. Thus, you cannot produce motivation in employees by satisfying them.

**The Development of Satisfaction**

As an attitude, satisfaction follows the same type of development as other attitudes do. Describing the details of this development is beyond our scope, but there are a few points that can be made that have practical significance.

First, *early experiences tend to carry more weight in the formation of satisfaction.* Once an employee starts down the road to satisfaction (or dissatisfaction), it is difficult to derail them and change those attitudes later in time. Thus, organizations should work to ensure satisfying situations for employees early in their tenure.

Second, *attitudes become rigid over time.* Though it is not impossible to adjust an
attitude that has considerable history, such changes are usually shallow and temporary.

Third, work attitudes like satisfaction are based primarily in expectancies. Realistic job previews at hire can help to clarify job expectations so that there is a better chance that they will match the expectations of the employees. When the employee is disappointed due to unmet expectations, dissatisfaction is a probable result.

Taken together, these three principles underscore the importance of one’s initial impressions and perceptions of their jobs on the development and maintenance of satisfaction. Satisfied employees are built from the beginning, from the first moments that they spend on the job. But we still haven’t discussed what specific factors contribute to satisfaction; in other words, what can employers do to foster a sense of satisfaction with work?

**Modeling Satisfaction**

Despite the amount of time people spend thinking about and discussing the negative aspects of their jobs, overall people tend to be satisfied with their jobs. In fact, surveys have found that the percentage of people reporting satisfaction with their jobs averages between 80 and 90 percent. So, given that people are basically happy with their jobs, what factors contribute to their individual job satisfaction, and what factors come out of their job satisfaction?

Researchers have come up with a framework for the factors that lead to job satisfaction (called antecedents), and the factors that are the outcomes – both positive and negative – of job satisfaction (called consequences). This model is portrayed on the next page.

**Antecedents - Predicting Job Satisfaction**

The idea behind the antecedents listed is that job satisfaction is affected by the structure and the dimensions of the job, as well as what the job provides. A recent study reported that the match between worker preferences regarding work schedule, shift, number of hours, and organizational policies regarding those variables was positively related to employee attitudes and job satisfaction. In addition, low levels of job satisfaction
are consistently reported by employees who feel overloaded and stressed at work and by those who experience high levels of “daily hassles.” It should be noted here that important antecedents such as feedback are routinely more difficult to work into the work of pharmacy. Thus, to some extent, pharmacy is a step behind from the start.

Other antecedents of job satisfaction include the relationships that develop with supervisors and co-workers and the clarity with which job roles and expectations are stated. Recall that unmet expectations are good predictors of dissatisfaction; when expectations are not well-defined, it is easier for the employee to claim that their expectations were not met or to keep changing what they demand from the job to match their whims. Another important variable in job satisfaction is organizational fairness; employees’ perceptions of the fairness of policies, procedures, and treatments affect their attitudes, behaviors, performance, and satisfaction at work. Further, employee perceptions of pay, benefits, and other organizational “perks” contribute to satisfaction as well. Finally, conflicts experienced as a result of family and other personal considerations can lead to dissatisfaction. In the late 1990s, Dr. Tony Grasha discovered through interviews with
pharmacists that many reported it to be difficult to perform even simple family-related tasks while at work, such as making a doctor’s appointment for their child or calling their significant other to simply say hello. As a result, when the opportunity arose (i.e., business slowed, etc.), many of the pharmacists spent the free time on non-work tasks like calling family and friends.

Unfortunately, there are also antecedents to satisfaction that are not within the control of the organization, at least not directly. Research has shown that people have stable individual and personality characteristics that predispose them to respond positively or negatively to job contexts. For example, people who are extraverted, agreeable, and conscientious tend to be satisfied at work and over the course of their careers. Recent studies have indicated that other personality traits such as self-esteem also affect job satisfaction. In other words, how people view themselves, as well as their individual personality traits, directly affect how they experience their jobs. The importance of these observations is that sometimes, despite the best efforts of the employer, certain employees just can’t be satisfied.

**Consequences - The Effects of Satisfaction**

The experiences that make up an individual’s experience of job satisfaction, then lead to the positive or negative outcomes, or consequences, of their job satisfaction. Research indicates that, all other things being equal, organizations where employees are satisfied are more profitable and productive. This performance increase can be observed in both task-related behaviors (such as decreased error for instance) or in more citizenship-oriented behaviors (like catching mistakes made by colleagues or helping each other in busy periods). Thus, satisfaction may impact errors indirectly through its effects on performance at an organizational level. It is not likely to make an individual employee more cautious or error-free, however. The correct unit of analysis is the organization.

Dissatisfaction is connected to more negative behaviors, as might be expected. While the reasons that people are late or absent from work can vary, dissatisfied employees may use behaviors such as turnover intentions and absences to express their sense of disappointment with the job. Other negative consequences can include behaviors that would be considered counterproductive, such as extended breaks, poor attitudes
toward customers, aggression towards co-workers, and even sabotage. The disaffection that a lack of satisfaction can foster may also translate into poorer vigilance and unwillingness to correct errors that are discovered. In short, where satisfaction will not necessarily improve an individual’s performance per se, dissatisfaction will likely produce negative consequences that can affect the entire organization.

The State of Satisfaction in the Pharmacy

Satisfaction is quite well-represented in the pharmacy literature. A quick Internet database search generates thousands of articles related in some way to job satisfaction among pharmacists and medical staff in general. Based on a subset of these studies and other types of articles, it is possible to get some idea of the prevailing attitudes about and the state of the data concerning job satisfaction. There are some important conclusions that can be drawn from this literature that not only frames the current thinking about the topic, but also suggests directions for future thinking and study.

For the most part, medical professionals are satisfied with their jobs. In studies where the data were reported appropriately, pharmacists and other medical professionals consistently reported satisfaction levels above the midpoint of the scale (of course, this also begs the question about the validity of the scale, which will be addressed shortly). This realization is important because it reframes the debate about satisfaction in pharmacy away from an assumption of disgruntled, unhappy workers to an assumption of general satisfaction and contentment. By so doing, we can conclude that any improvements in job satisfaction are likely to be a) short-lived and b) relatively small. Psychologists who study satisfaction have known for some time that, as an attitude, it forms and solidifies fairly quickly and is resistant to change. A second reason why this conclusion matters is that it places new emphasis on whether improving job satisfaction is really linked to improved performance, reduced errors and enhanced quality of care. Researchers in psychology have debated this very point for years and there is still some disagreement, yet the health care industry appears to have decided that satisfaction is a main determinant of health care quality. We would caution against this assumption and instead recommend that satisfaction be considered an important variable for such outcomes as turnover, general mental health and work stress.
Improvements in satisfaction reported in the literature are often quite small. There are many examples of interventions used to enhance job satisfaction: redefined work shifts, collaborative rounds, automation, and so forth. However, when the data are closely examined, although the results are statistically significant, one is left to wonder about the practical significance of the findings. This is important because it suggests that satisfaction be seen as an effect rather than a cause, an assumption that defines much of the available literature in pharmacy. Unfortunately, detailed studies of the underlying factors that may contribute to satisfaction and that also may contribute to performance quality and reductions in errors are sadly lacking. In other words, we wonder if so much time is being spent on satisfaction that other important antecedents are being ignored that could generate more “bang for the buck.”

There is a great deal of focus on comparing satisfaction across job categories. Many of the studies we examined provided detailed comparisons on measures of satisfaction between different job categories. A general trend that was evident in these studies was that roles that could be considered more “administrative” included a higher level of satisfaction than more “front-line” sorts of roles. Beyond this finding, many of the comparisons did not seem to clearly suggest why they were important. This is important for the future study of satisfaction in medical settings because these comparisons are potentially useful but they need to be explored beyond merely noting group differences in mean satisfaction scores. For example, why are there differences? Are the differences artifactual (statistical anomalies based on scale construction or a lack of generalizability across job categories)? What about satisfaction within persons – how does satisfaction change over time within these job categories, and what interventions do such changes suggest? There is much to be learned about the formation of satisfaction-based attitudes that is currently being missed.

The measurement of satisfaction is somewhat suspect. For example, one study used a 4-item measure of “satisfaction” that included questions regarding turnover intentions and whether the job would be recommended to a friend. Such measures show suspect construct-related validity and may not be capturing job satisfaction at all. Further, many of the studies we reviewed did not provide any relevant information about the way in which satisfaction was measured. This is important because measurement is the lifeblood of science. If everyone studying satisfaction in medical professionals are using different
measures that are not validated and comparable, it is difficult to ascertain exactly what we know about the state of satisfaction in the field. There are several well-researched and validated measures of job satisfaction in the literature that could easily be adapted to the medical field; the Job Descriptive Index and the Job Satisfaction Survey are two such instruments. Pharmacy must be more diligent in the choices of measures when they study psychological constructs like satisfaction.

If you would like to measure satisfaction in your facility, you can get the Job Descriptive Index (JDI) through Bowling Green University, and the Job Satisfaction Survey (JSS) is available from Paul Spector at the University of South Florida. The instruments are free if you agree to share the data with the authors so that they can develop norms.

**Satisfaction as a Practical Issue in Pharmacy**

We will conclude with a series of suggestions concerning the pragmatic use of job satisfaction in pharmacy management. Recalling the chart you saw previously, some essential points can be emphasized.

1) **The employees' satisfaction is not entirely under the control of the organization or the supervisor.** While it is valid to say that certain aspects of the work environment can affect job satisfaction, a significant source is also the overall tendency in a given individual toward either satisfaction or dissatisfaction. It is naïve to conclude that an entire workforce can be induced to the same level of satisfaction across the board, or that a given intervention will be received favorably by all staff members. Instead, it is more prudent to attend to the controllable antecedents of satisfaction (i.e., work design, work-family conflict, etc.) and realize that not everyone will be pleased.

2) **The pharmacy is notoriously a “feedback-absent” environment, and that may adversely affect satisfaction.** We mean this in the sense that pharmacy staff produce thousands of prescriptions a week in some stores and rarely (if ever) learn whether they did the job correctly or not. They are left to assume everything was done well because no one complained. Further, when feedback does occur, it is often focused on product output
(scripts per day, etc.) to the exclusion of other aspects of pharmacy work. Research has shown that satisfaction with work can suffer because of poor feedback, primarily because workers become uncertain about their contribution to both personal and organizational goals. Pharmacies would do well to find ways to incorporate more frequent and diverse performance feedback into the daily lives of employees.

3) **Satisfaction is most important for predicting work behaviors that may not necessarily be task-oriented.** Capturing errors in pharmacy requires team effort, since data from simulated error-checking tasks show that we are less sensitive to mistakes that we produce versus mistakes that others produce, mainly because we overestimate our own competence. Satisfaction is an important precursor for the development of extra-role behaviors like altruism and loyalty, which should lead to more favorable environments for error capture. Though research must be done to test this hypothesis, the alternative (that satisfaction leads to fewer errors produced) is clearly not a viable one.

4) **A main consequence of dissatisfaction is job withdrawal, which affects pharmacy in a number of ways relevant to error.** Job withdrawal can manifest itself in absenteeism, turnover intentions (a critically important issue for pharmacy), reduced effort, and disaffection for the job itself. As we lose engagement in our work, the potential for error tends to increase due to a relaxed attitude about checking and a lessening of one’s sense of responsibility to the job and the organization. Thus, we are faced with an asymmetrical situation where satisfaction does not improve performance beyond one’s ability, but dissatisfaction can reduce one’s performance in spite of ability. In other words, we want our employees to be satisfied to avoid performance decrements.

So, does job satisfaction have anything to do with error in the pharmacy? I think the best answer is a qualified “yes.” But it is not likely to be a direct and proximal predictor of errors – instead, job satisfaction both sets the stage for abilities and skills to be maximally effective on the job and prevents counterproductive behaviors and states from attenuating the abilities of employees to perform their work. By attending to the antecedents of satisfaction in both work design and function, we can focus on more immediate predictors of error knowing that the job attitudes of employees will support those efforts.