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Medical Marijuana in the News

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Abstract
This study examines how the United States newspaper media represents medical marijuana. The literature review highlights the history of marijuana, the social control of marijuana, the medicalization of marijuana use, and the relevance of agenda-setting theory to media coverage of medical marijuana. An ethnographic content analysis of newspaper articles concerning medical marijuana revealed seven distinct typologies of media representations of the subject matter. The results reveal that (64.2%) of the overall content treated medical marijuana positively; that changes in presidential administrations appear to have had an effect on newspaper coverage of medical marijuana; and that geographical regions of the United States differ in their coverage of news and editorial content of medical marijuana articles. The legal and policy implications of the findings are explored.

Key Words: medical marijuana, medicalization, law and social control, agenda-setting theory

MEDICAL MARIJUANA IN THE NEWS

Marijuana has been referred to as both a “devil weed” and a “miracle drug.” Although the debate on the legalization of marijuana for personal use has raged for decades (e.g., Joffe & Yancy, 2004; Leinwand, 1971), the issue of medical marijuana (i.e., the use of marijuana for medicinal purposes) has become one of the most passionately debated policy issues of the early 21st century in the United States. The debate has been spurred, in part, by the fact that at least 14 states have legalized medical marijuana even though federal law prohibits such use of the drug (Mikos, 2009). National public opinion polls throughout the past 15 years have consistently demonstrated that between 60% and 85% of adults support the medicinal use of marijuana upon the recommendation of a physician (American Association of Retired Persons [AARP], 2004; American Civil Liberties Union [ACLU], 1995; NBC News/Wall Street Journal, 2009; Stein, 2002). Yet, news reports often make it clear that medical marijuana use presents...
a variety of issues that go beyond the debate over legalization. Through a content analysis of newspaper articles, this exploratory study attempts to provide a framework for identifying the issues that repeatedly emerge in news reports concerning medical marijuana and attempts to analyze these issues with an eye toward improving public policy.

 REVIEW OF THE LITERATURE

Marijuana, the common name for the cannabis sativa plant, is a vegetal substance that contains more than 460 known chemicals, over 60 of which are unique cannabinoids (Ben Amar, 2006; Julien, Advokat, & Comaty, 2008). Cannabinoids naturally occur in the nervous and immune systems of animals. They bind to cannabinoid receptors and are structurally related to delta-9-tetrahydrocannabinol, also known as THC, the major psychoactive ingredient in marijuana (Ben Amar; Lambert & Fowler, 2005). The prevalence of marijuana use in the United States is highlighted by the fact that it is the most used illicit drug in America (U.S. Department of Health and Human Services, 2007).

The Social Control of Marijuana

Marijuana has been governed by formal social controls for many years in the United States (Becker, 1955). The first federal drug legislation was passed in 1906 in the form of the Pure Food and Drugs Act (1906), a law which required that intoxicating substances be included on labels, including cannabis (Gieringer, 1999; Matthew, 2009). Eight years later, the Harrison Act of 1914 required registration and payment of an occupational tax by all persons who imported, produced, dealt in, sold, or gave away opium, cocaine or their derivatives (Bonnie & Whitebread, 1970; Matthew). Although marijuana was not regulated by the Harrison Act, state laws began to do so in the same year the Harrison Act was passed. Between 1914 and 1931, 21 states restricted the sale of marijuana as part of their general narcotics law; 4 states outlawed its cultivation, and 1 prohibited its use for any reason (Bonnie & Whitebread). These early anti-marijuana laws received little public attention.

The Marihuana Tax Act of 1937 was the first federal law specifically targeting marijuana. The Act required anybody who cultivated, distributed, or used marijuana to pay a $1 per ounce tax for industrial or medicinal use, and $100 per ounce for recreational use (Matthew, 2009). Although the Act did not criminalize marijuana use, the use of regulatory social controls via taxation increased the price of marijuana to such a degree that the tax decreased the use of marijuana for both medicinal and recreational use (Marshall, 2005). Around the same time, the U.S. federal government also began efforts to portray marijuana negatively in an attempt to increase informal social controls over marijuana use. For example, in 1936, the government commissioned the documentary Reefer Madness, a film which depicted high school students smoking marijuana then experiencing psychotic breaks in which they engaged in violent acts that included killing their parents (Marshall). The following year, an article co-authored by the Commissioner of the Federal Bureau of Narcotics depicted marijuana as a poison that caused young individuals to leap to their deaths (Anslinger & Cooper, 1937). These propaganda efforts facilitated a societal paranoia concerning marijuana use. Congress capitalized on this paranoia in the early 1950s by shifting formal social controls from the regulatory style to the penal style (see, e.g., Black, 1984; Owen, Fradella, Burke, & Joplin, in press), as evidenced by the passage of The Boggs Act of 1951, the Narcotic Control Act of 1956, and The Comprehensive Drug Abuse Prevention and Control Act of 1970 (Bonnie & Whitebread, 1970; Matthew, 2009). The portion of the latter law formally regulating illicit drugs is commonly referred to as the Controlled Substances Act. It differentiated five “schedules” of drugs which varied in terms of each controlled substance’s abuse potential, known effects, perceived harmfulness, and level of accepted medical use. Marijuana was classified as a Schedule I controlled substance, a category which is supposed to be reserved for substances demonstrating a high potential for abuse while having no accepted medical utility, such as LSD and Heroin (Bonnie & Whitebread, 1974; Matthew). Marijuana’s inclusion in Schedule I sparked much debate (Khatapoush, 2002, Koch, 1999, Marshall, 2005); numerous attempts to reschedule marijuana, however, have been unsuccessful.

Medicalization

Medical use of marijuana remained legal in much of the United States until the Controlled Substances Act was enacted in 1970. Yet, that same time period saw a resurgence of interest in the use of marijuana for medical purposes, spurred largely by injured U.S. soldiers returning from the Vietnam War who spoke highly of marijuana’s pain-relieving qualities (see Ferraiolo, 2007; Koch, 1999). Between 1978 and 1984, the public pressured legislatures in dozens of states to recognize the medicinal value of marijuana (Koch). According to Pacula, Chriqui, Reichman, and McLerath (2002, p. 417), “By the end of 1982, 31 states and the District of Columbia had passed some sort of legislation that addressed the use of medicinal marijuana.” In 1985, the Food and Drug Administration approved Marinol and Nabilate, which are Schedule II prescription drugs that contain THC (Clark, 2000). The introduction of these drugs advanced the movement to legalize medical marijuana because some believed these new drugs could not provide the same effects as using marijuana (Pacula et al., 2002). Moreover, these advocates argued that marijuana did not induce users to experience several of problems associated with the two new prescription drugs. Specifically, Marinol and Nabilate users complained that the effects of the pills were too strong and wore off quickly; they were too expensive; and they could be difficult for nauseous patients to digest (Clark).

The use of marijuana by cancer patients in order to relieve their chemotherapy-induced nausea further pressured the legalization of medical marijuana (Ferraiolo, 2007; Koch, 1999, Pecula et al., 2000). The AIDS epidemic also had a considerable impact because individuals realized that marijuana could cheaply and effectively treat the AIDS wasting syndrome (Ferraiolo; Koch). This series of events eventually led to the passage of one of the most significant pieces of state legislation concerning medical marijuana: The Compassionate Use Act (CUA) was enacted in 1996 when California residents passed Proposition 215 with 56 percent of the vote (Khatapoush, 2002). The law allowed individuals to cultivate and possess marijuana, which was one of the most significant aspects considering that the prior attempts at medical marijuana legislation fell short of actually providing individuals with marijuana. Subsequent legislation in California established a program for voluntary registration of qualified medical marijuana patients through a statewide identification card system (Brown, 2008). The U.S. federal government, however, was quick to point out that marijuana was still a Schedule I controlled substance under federal law (Koch, 1999). That fact, however, did not deter 13 other states (Alaska, Colorado, Hawaii, Maine Michigan, Montana, Nevada, New Jersey, New

1. There are two accepted ways of spelling marijuana: “marijuana” and “marihuana.”
Mexico, Oregon, Rhode Island, Vermont, and Washington) from following California’s lead in enacting medical marijuana laws (ProCon.org, 2010).

The federal government officially maintains there is no scientific evidence proving marijuana has legitimate, therapeutic uses (Koch, 1999; Seaman, Fass, Maniscalco-Feichtl, & Abu-Shraie, 2007; U.S. Food and Drug Administration, 2006). Yet, there are numerous “scientific studies that document the medical efficacy and safety of smoked marijuana [that] are published in peer-reviewed medical journals and are available through the National Library of Medicine” (Carter & Mirken, 2006, p. 46; see also ProCon.org, 2010). Several therapeutic findings have been consistently noted in this body of literature, including treatment for pain, nausea and vomiting, wasting syndrome and appetite stimulation, neurological symptoms (including muscle spasticity), and glaucoma (Abrams et al., 2007; Carter & Mirken, 2006; IOM, 1999; Pacula et al., 2002; U.S. General Accounting Office, 2002). Moreover, the substance is remarkably nontoxic and has minimal side effects compared with medicines for which it may be substituted (Grinspoon). Accordingly, in 2009, the American Medical Association (AMA) reversed its 72-year-old policy concerning medical marijuana and urged that marijuana’s status as a Schedule I controlled substance should be reviewed (see Bennett, 2009). In 2004, the American Nurses Association (ANA) had taken an even stronger position when it recommended that patients have “safe access to therapeutic marijuana/cannabis” because it has been safely “used medicinally for centuries” and “has been shown to be effective in treating a wide range of symptoms and conditions” (as cited in ProCon.org, 2010).

The Intersection Role of Politics and Media

Politicians have often capitalized on the media’s ability to help shape public perceptions of drugs. “Presidents can obviously provide necessary outlet for public concern... Thus, presidential policy rhetoric can indirectly induce moral panics by influencing public opinion” (Hawdon, 2001, p. 422). Indeed, media coverage not only can influence what the public deems important, but also can shape the public’s views on a given topic (McCombs & Reynolds, 2002; Mastroianni & Noto, 2008). Perhaps this point is best exemplified by the way in which Ronald Reagan’s rhetoric garnered public support for the “War on Drugs” (Hawdon; Krug, 1989). Conversely, it should not be surprising that Stryker (2003) found that coverage negatively depicting marijuana use increased in 1996 when Bob Dole claimed that Bill Clinton, his opponent in the U.S. presidential election, condoned the use of marijuana, and, conversely, media coverage positively depicting marijuana use increased the following year when the federal government announced it would fund a study exploring the medical use of marijuana.

In addition to national news coverage of political rhetoric on major policy issues, the news content of regional and local media outlets can similarly manifest local political attitudes and outcomes (e.g., Gentzkow & Shapiro; Gerber, Karlan, & Bergan, 2006). Empirical research has even demonstrated that news organizations slant coverage of particular policy issues to conform to or influence the politics of a geographical region targeted by a particular media outlet (e.g., Branton & Dunaway, 2009). Finally, local newspapers also allow the general public to express their opinions in editorials, letters to the editor, and similar forums, thereby providing “a unique opportunity to study opinion expression of the citizenry” (Hoffman & Slater, 2007, p. 58).

By the start of the 21st century, people had come to rely on the mass media for 80% of their information about news and public affairs (Yang & Stone, 2003). And while newspaper readership and television news viewership have both declined in the past few years, according to a study by The Pew Research Center for the People and the Press (2008), the republication of news articles on the internet has resulted in roughly 81% of Americans receiving daily news updates. Thus, although the medium in which news stories are delivered may be evolving, the content of news coverage remains important since news articles and commentary provide people with information about timely topics, such as medical marijuana. An analysis of the content of medical marijuana news stories and editorials should not only shed light on current media views on the subject, but also should provide insights into the problems reported by jurisdictions which have implemented medical marijuana laws—findings which have implications for law and public policy.

The Purpose of the Present Research

With increasing public support for medical marijuana, there is a corresponding increase in the potential for additional states to pass medical marijuana laws. There is, however, still much opposition and concern about new medical marijuana laws. This study is intended to capture the pulse of the nation concerning medical marijuana through a content analysis concerning newspapers articles from across the country dealing with medical marijuana. Specifically, the researchers sought to investigate the following research questions:

1. How is the issue of medical marijuana being portrayed in U.S. newspapers beyond reporting poll results of the percentage of respondents favoring or opposing the legalization of marijuana use for medical purposes?
2. Are variations in the substantive treatment of medical marijuana in the news (positively, negatively, or neutrally) related to any notable factors, such as the primary theme of the article, the President in office at the time of publication, or the region of the country in which the newspaper story was published?
3. Are there lessons that can be learned from a review of newspaper articles that might help improve law and public policy concerning medical marijuana?

RESEARCH METHODOLOGY

Data Collection

The research sample utilized for this study was collected using LexisNexis Academic. That service’s “U.S. Newspaper and Wires” database was searched using the terms “medic* /5 mar*una.” This search phrase was used in order to encompass both of the common spellings of the word: “marijuana” or “marihuana,” as well as variations on the word “medical,” such as “medicinal.” The search of the two words within a five-word proximity of each other was employed to reach data that might have referred to the subject matter in a manner other than “medical marijuana,” such as “medicinal use of marijuana” or “marijuana for medical use.” The search examined one full year of newspaper data starting on June 15, 2008 and ending June 15, 2009. These dates were selected so that media coverage in the last few months of the presidency of George W. Bush could be compared with the first few months of Barack Obama’s
presidency. The search yielded a total of 1,930 newspaper articles. From this population, a random sample of 321 articles was selected and subjected to content analysis.

Data Coding and Analyses

Qualitative content analysis

The 321 articles selected for the research sample were reviewed using ethnographic content analysis (Altheide, 1996). This method is particularly appropriate since multiple articles were reviewed in an attempt to discover emergent patterns and differing emphases among and between the articles reviewed. Consistent with the method as set forth by Altheide, the research involved a focus on narrative data in which both categorical and unique data were obtained from each article studied. Articles were then classified based on the patterns that emerged during the analysis.

The qualitative analysis was conducted in three phases. First, cases in the sample were analyzed and separated into one of three groups. The first category was termed “not relevant.” Articles assigned to this category were those in which some variation on the term “medical marijuana” appeared, but had nothing to do with the substance of the article. Of the 321 articles in the research sample, 50 (15.5%) articles were irrelevant to the research question and were, therefore, discarded.2 Within the 271 remaining, relevant articles, a distinction was made based upon the importance of medical marijuana to the substance of the article. Articles in which medical marijuana was discussed only briefly were coded as “mentioned in passing” (N=100; 31.3%). In contrast, those articles in which medical marijuana was the focus of the news feature or editorial were coded as “key” (N=171; 53.2%).

In the second phase of the research, the 271 articles in which medical marijuana evidence was discussed (whether mentioned in passing or as the key focus of the new feature or editorial) were further broken down based on the type of treatment given to the topic. Treatment was coded as being positive, negative, or neutral. To be classified as “positive,” the author of the article has to praise or offer support either for the medicinal use of marijuana or for medical marijuana laws. To be classified as “negative,” the author had to criticize or argue against the medicinal use of marijuana or for medical marijuana laws. Articles which neither praised nor criticized medical marijuana were coded as “neutral.” The neutral category included all news features in which a journalist reported on a medical marijuana story either without offering a pro or con spin to the story or by presenting both pro and con arguments in an objective fashion. Using these definitional criteria, one researcher independently coded these 271 articles as positive, negative, or neutral. Then, a random sample of 90 articles (33% of the 271) was independently coded by a second researcher. An impressively high level of inter-rater reliability was achieved, as both researchers coded all but 2 of the 90 articles (97.8%) identically.3

In the third and final phase, qualitative comparisons among and between the cases that fell into each of the categories were conducted. Because feature news stories by reporters are qualitatively different from opinion pieces (e.g., “op-eds” and letters to the editor), they were pre-coded into a public opinion category. Consistent with Altheide’s (1996) methodology, all of the other news features were compared and contrasted without predefined content analysis categories, thereby allowing for the emergence of central themes that are explored in detail in the results and discussion section of this article.

Quantitative data analyses

Articles were also coded for two additional variables. First, because the Bush and Obama administrations differed significantly in their views regarding the role of the federal government enforcing the provisions of the Controlled Substances Act of 1970 in states that had legalized the medicinal use of marijuana, articles were coded for which president was in office at the time of publication. Of the articles in the research sample, 125 (46.1%) were published in the last few months of George W. Bush’s presidency and 146 (53.9%) were published after Barack Obama took office. A chi-square analysis were used to assess the significance of the associations between the president in office at the time of the article’s publication and the substantive treatment of medical marijuana in the article (i.e., positive or negative).

Second, articles were coded by the regions of the country in which the article was published. These different regions included; West, Mid-West, South, and North according to the United States Census Bureau (2000). Seven articles were excluded from this variable because they were published in national newspapers. A chi-square analysis were used to assess the significance of the associations between the region of publication and the substantive treatment of medical marijuana in the article (i.e., positive or negative).

RESULTS

Typologies

As Table 1 illustrates, six distinct typologies emerged during the qualitative analysis of the 271 relevant cases in the research sample; miscellaneous articles were grouped together in a catch-all category.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Cases</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispensaries</td>
<td>14</td>
<td>5.2%</td>
</tr>
<tr>
<td>Legal and Regulatory Issues</td>
<td>75</td>
<td>27.7%</td>
</tr>
<tr>
<td>Crime</td>
<td>21</td>
<td>7.75%</td>
</tr>
<tr>
<td>Opinions</td>
<td>51</td>
<td>18.8%</td>
</tr>
<tr>
<td>Passage of medical marijuana laws</td>
<td>67</td>
<td>24.7%</td>
</tr>
<tr>
<td>Politicians’ Stances</td>
<td>21</td>
<td>7.75%</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>22</td>
<td>8.1%</td>
</tr>
<tr>
<td>N</td>
<td>271</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

2. These articles were also reviewed for duplications, such as if a story by the Associated Press chain had run in several markets. The researchers intended to discard any duplicate articles (thereby counting it as one story), but no such duplicates were found among the 321 articles randomly selected. Accordingly, no duplicate articles were discarded.

3. The two articles on which the researchers disagreed concerned news stories in which a reporter presented positive and negative information about medical marijuana, but one coder felt the reporting was reasonably neutral while the other felt that although both sides were presented, the overall tone of the article leaned more one way than the other. The researchers discussed the two articles until they were able to mutually agree upon their proper coding.
Politicians’ Stance on Medical Marijuana (N = 21; 7.7%)

Because medical marijuana has become an important political issue, politicians are often forced to take a position on the legal status of medicinal marijuana use. As Table 2 demonstrates, politicians favoring legalization of medical marijuana slightly outnumbered those who opposed it.

<table>
<thead>
<tr>
<th>Key to Article</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>Mentioned in Passing</td>
<td>10</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>11 (52.4%)</td>
<td>8 (38.1%)</td>
<td>2 (9.5%)</td>
<td>21 (100%)</td>
</tr>
</tbody>
</table>

Politicians’ views on legalization appear to be a function of two primary causes: (1) their own personal experiences with people who have sought to use marijuana for medicinal purposes; and (2) the general political will of their constituents. Consider the change in Representative Jerry McNerney’s views on medical marijuana. Although he formerly supported the arrest and prosecution of medical-marijuana users in light of federal law and policy, McNerney changed his position after visiting with patients who benefited from using marijuana (Richman, 2008). His spokesman explained that:

> “Jerry McNerney’s views on medical marijuana. Although he formerly supported the arrest and prosecution of medical-marijuana users in light of federal law and policy, McNerney changed his position after visiting with patients who benefited from using marijuana (Richman, 2008).”

His change in views may have been influenced by personal experiences with patients who have used marijuana for medicinal purposes. McNerney represents California’s 11th district, which comprises much of the San Francisco Bay area. This locale is known for being supportive of the medical marijuana movement. The fact that McNerney represents a state in which an overwhelmingly large proportion of the population supports medical marijuana allows his views to be in accord with the voters of his home district.

In the past year, the congressman has met several patients with debilitating illnesses that use doctor-prescribed medical marijuana. Hearing their stories, he feels that he cannot in good conscience deny doctor-prescribed treatment to a person that experiences excruciating pain on a daily basis. (p. 1)

It is important to note that McNerney represents California’s 11th district, which comprises much of the San Francisco Bay area. This locale is known for being supportive of the medical marijuana movement. The fact that McNerney represents a state in which an overwhelmingly large proportion of the population supports medical marijuana allows his views to be in accord with the voters of his home district.

In contrast, Connecticut Governor M. Jodi Rell politically opposed medical marijuana so much that she vetoed a bill that would have legalized the use of medical marijuana in her state.

Although she said that she, as a cancer survivor, had sympathy for those who wanted to use marijuana for pain management, she said that her sympathy could not overcome her concerns that those seeking to obtain the drug would need to break the law to purchase it. (Keating, 2009, p. 5)

Rell likely vetoed the bill because, unlike in some state, polls failed to demonstrate significant support for medical marijuana in Connecticut (Keating). This absence of voter support appears to have influenced Rell’s political stance on medical marijuana more than her own experiences as a cancer survivor.

Legal and Regulatory Issues (N = 75; 27.7%)

Since the passage of the CUA in 1996 in California, various legal and regulatory issues regarding medical marijuana have arisen in the states which have legalized medical marijuana. Table 3 shows that the articles discussing such issues positively outnumber those presenting a negative opinion by a margin of nearly 2 to 1.

<table>
<thead>
<tr>
<th>Key to Article</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Mentioned in Passing</td>
<td>32</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>50 (66.7%)</td>
<td>22 (29.3%)</td>
<td>3 (4.0%)</td>
<td>75 (100%)</td>
</tr>
</tbody>
</table>

As discussed in the literature review, the laws of the 14 states which recognize some form of medical marijuana contradict federal law. Federal agents have conducted numerous raids of marijuana dispensaries in these states, primarily in California. These raids were covered in 13 of the key articles concerning legal and regulatory issues, comprising 31.7% of the key articles. Such raids, which resulted in federal drug charges being levied against owners or operators of dispensaries operating in accordance with state law, prompted local politicians to lament the actions of the federal government.

It’s just unfortunate that we have this discrepancy between the state and federal laws…. If the federal courts are going to give the states the right to make their own decisions on these issues, then they have to give us the right to continue with that. (Yohe-Mellor, 2008, p. 5)

During his presidential campaign, Barack Obama promised to stop federal raids on state medical marijuana dispensaries which were operating in accordance with state laws. This pledge was mentioned in 12 of the key articles concerning legal and regulatory issues, comprising 29.3% of the key articles. In one of these articles, White House spokesman Nick Shapiro explained that:

> “The President believes that federal resources should not be used to circumvent state laws, and as he continues to appoint senior leadership to fill out the ranks of the federal government, he expects them to review their policies with that in mind.”

In March of 2009, U.S. Attorney General Eric Holder announced that the Obama administration would “effectively end the Bush administration’s frequent raids on distributors of medical marijuana” and focus federal drug enforcement on “traffickers who falsely masqueraded as medical dispensaries and ‘use medical marijuana laws as a shield’” (Johnston & Lewis, 2009, p. A20).

4. See also Cathcart, 2009; Dinan & Conley, 2009; Egelko, 2008; Egelko, 2009a; Jacob, 2009; Ma, 2008; Parsley, 2008; Sherry, 2008; Simerman, 2009a; Stancliff, 2008; Tam, 2009a; Yohe-Mellor, 2008.

5. See also Cathcart, 2009; Dinan & Conley, 2009; Egelko, 2009; Huntley, 2009; “Inside the Times,” 2009; Simerman, 2009b; Stanton, 2008; Tam, 2009a; Woo, 2009a.
Newspapers also reported on civil challenges to state laws brought by county governments. For example, San Diego and San Bernardino counties challenged provisions in California law which required counties to issue identification cards which protect holders from arrest by state or local police when acting in accordance with the laws concerning medical use (Egelko, 2009b). Notably, the U.S. Supreme Court refused to consider an appeal by the counties, effectively upholding the California statutory and regulatory framework (San Diego County, Cal. v. San Diego NORML, 2009).

Another recurring theme concerning legal and regulatory issues raised by medical marijuana laws concerns the challenges medical marijuana use poses under other existing regulatory frameworks. For example, the California Department of Motor Vehicles revoked a medical marijuana user’s driver’s license after determining that she was unfit to drive because of her habitual use of the drug (Egelko, 2008). Similarly, at the University of Colorado at Boulder, a student who possessed a medical marijuana card successfully fought campus authorities over a threatened suspension which included mandatory community service and drug testing after university officials discovered marijuana in his dormitory room. After his ordeal, the university revised its policies to accommodate Colorado’s 8-year-old medical marijuana law (Sherry, 2008). These articles illustrate that although some states allow individuals to possess and use marijuana for medicinal purposes, there are complex regulatory issues that need to be addressed to harmonize social policies regulating everyday activities with the lawful use of medical marijuana.

Another major legal and regulatory theme that appeared in numerous articles in the research sample concerned media attempts to explain the details of medical marijuana laws to readers. One such article summarized medical marijuana use guidelines issued by the California Attorney General (Tam, 2008a). Nine additional articles in the research sample similarly explained regulatory guidelines. Collectively, these 10 articles comprised 24.4% of the key articles in the legal and regulatory category. Several of these news stories covered guidelines concerning regulatory standards for cultivation and sale for dispensaries (Lagos, 2009). These articles illustrate the important role that the media plays in disseminating and explaining changes in regulatory social controls.

**Passage of Medical Marijuana Laws (N = 67; 24.7%)**

More than a quarter of the articles in the research sample discussed either medical marijuana laws pending approval by voters or legislatures, or confusion caused in the wake of recent passage of a medical marijuana law. As Table 4 illustrates, the overwhelming number of articles in this category were positive. But qualitative analysis revealed that the major division between positive and negative articles often concerned whether the article was reporting on a pending medical marijuana law or reporting problems with a recently enacted one.

<table>
<thead>
<tr>
<th>Table 4. Passage of Medical Marijuana Laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
</tr>
<tr>
<td>Key to Article</td>
</tr>
<tr>
<td>Mentioned in Passing</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

6. See also Barber, 2009; Bemstein, 2008; Lagos, 2009; Stanchiff, 2008; Tam, 2008b, 2008c, 2009h; Woodward, 2008.

Most of the articles concerning pending laws were positive, while the articles dealing with confusion over new medical marijuana laws were decidedly negative. The overwhelming positive news coverage of potential medical marijuana legislation is consistent with the various polls which consistently demonstrate that the majority of adults in the United States favor the medicinal use of marijuana upon the recommendation of a physician (AARP, 2004; ACLU, 1995; Angus Reid Poll, 2009; NBC News/Wall Street Journal, 2009; Stein, 2002). Some of the positive articles relayed stories of users who found relief from their symptoms by using marijuana, such as this story of an Alabama boy:

After Michael illegally obtained marijuana to cope with his pain, his father began to see a change in Michael: he was not suffering as much, nor as riled up and in pain all the time and, most importantly, he was at peace with himself and his condition. Up to that point, Bobby Phillips had been a staunch opponent of marijuana legalization. Now, he saw things in a new light. (Taylor, 2009, p. 25)

In contrast, many of the negative articles concerned the passage of a medical marijuana law in Michigan during the time period examined in this study. One such article highlighted the fact that medical marijuana would soon be legal to use, but still be illegal to obtain since Michigan’s medical marijuana law did not include a legal avenue for individuals to obtain medical marijuana (Shaw, 2008). Another article questioned whether inmates with legitimate health problems should be able to use marijuana (“Poll: Stem Cells,” 2008). Such articles illustrate the need for new regulatory social controls to replace the penal social controls in effect prior to legalization.

The other negative articles in this category questioned the effectiveness of marijuana as a medicine. The article “First Pot Cards Ok’d,” for example, included a discussion by a physician who, referencing studies which failed to prove the drug’s effectiveness, urged evaluating other pain-killing methods before the use of medical marijuana (Armentrout, 2009).

We have to say that sucking a burning weed into your throat isn’t the optimal drug delivery system. There is nothing in marijuana that is not available in other medications. There is a high risk for diversion and abuse. And it is smoke, which studies have shown has more dangerous chemicals than tobacco. (p. 36)

**Public Opinion (N = 51; 18.8%)**

There are strong differences of public opinion concerning the use of marijuana for medical purposes, as Table 5 illustrates.

The negative public opinion articles concerning medical marijuana focus on opinions that medical marijuana causes more harm than good. One of the harms repeatedly cited by opinion

7. See also Andren, 2009; Canon, 2009; Crawford, 2009; “Judge Throws Out Medical Marijuana Ordinance,” 2009; Livio, 2008; Mucaha, 2009; Polta, 2009; B. Scott, 2009; Taylor, 2009.
writers is that medical marijuana laws can facilitate the use marijuana for recreational use.\(^9\) One article entitled “Doesn’t Add Up” argued: “Research has shown that in San Diego, for example, just two percent of those with medical marijuana ID cards can be categorized as having a serious illness. The remaining ninety-eight percent do not” (“Doesn’t Add Up,” 2009, p. 9). Such opinion pieces illustrate public perception that the legality of medical marijuana use has increased the availability of the drug for nonmedical use as well. This appears to be an especially acute concern with regard to the potential impact on youth (Sabet, 2008).

We oppose this legislation because it will send the wrong message to our children. We have seen firsthand the devastation that drugs and alcohol bring not only to the individuals who use these substances, but to their families and friends as well. Those of us who work in law enforcement are concerned that this legislation will result in increased availability of marijuana to young people, along with a reduction in the stigma associated with the drug. (“Calling Marijuana Medicine,” 2009, p. 10)

The writer also expressed concern that the increased availability of marijuana for medicinal purposes would reduce the stigma associated with drug, thereby negative affecting informal social controls of drug use (“Calling Marijuana Medicine”).

Opinion pieces written by opponents of medical marijuana frequently reference a connection to crime as one of their arguments against legalization. The editorial “Pot Ruse Must End” highlights this fear and discusses how those who grow marijuana for medicine are endangered because “druggies” want to steal their plants (“Medical Pot Ruse,” 2008). The author of the editorial stated that:

A man with a medical marijuana prescription confronted a pot pirate in his garden late at night, and the suspect fired a shot at the grower, who was naked and running around in his yard. The next night, the same grower said somebody else tried to steal his medical marijuana. He went outside and fired shots at suspects as they drove away in a vehicle, he claimed. Let’s face it: Gunfire is never exchanged by people fighting over Lipitor, NyQuil or Lexapro. This is more than just medicine. (p. 5)

Those who favor medical marijuana reference many different reasons in support of legalization. The most cited reason for why it should be legalized is the fact that it has many beneficial qualities for several symptoms and disorders experienced by numerous individuals nationwide. Of the 25 articles in which medical marijuana was the key focus of an editorial advocating for medical marijuana, 16 (64%) focused on the reported medicinal benefits of the drug.\(^10\) Some of these opinion pieces explain how the medical community’s support for medical marijuana use has continued to grow and solidify, especially in cases of pain caused by cancer, HIV/AIDS, multiple sclerosis, and other conditions (Carter & Bigelow, 2008). Some writers offer first-hand accounts of the benefits of using medicinal marijuana, often with regard to combating the effects of chemotherapy (“It’s Time to Legalize,” 2008).

One of the more interesting public opinion articles revealed how some law enforcement officials favor legalization of medical marijuana use because, as the title of the editorial explains, “Another View: I Shouldn’t Have to Arrest Sick People.” The author, a policeman, discusses how banning medical marijuana use means that seriously ill or handicapped individuals would be subject to arrest and prosecution. The author goes on to state that:

Although I do not personally support this, it is my job to enforce the law as written, and there is currently no legal way to be in possession of marijuana. It seems that some in law enforcement, as well as many others who oppose this bill, want to be disconnected from the reality of what it is trying to do. House Bill 648 is meant to protect those with debilitating illnesses and handicaps from being handcuffed, arrested and labeled as criminals for using marijuana when it is recommended by their doctors…. Neither state legislators nor the police should stop a sick patient from following his doctor’s advice. (Jardis, 2009, p. 31)

Financial reasons are also frequently raised in support of medical marijuana. Some of these editorials focus on the amount of money spent by local, state, and the federal governments—an estimated $10.7 billion—arresting, prosecuting, and punishing marijuana offenders (Swan, 2009). Others focus their arguments on the tax revenues lost by keeping the $113 billion-per-year marijuana industry underground (“Clio Should Move Slowly,” 2009).

Dispensaries (\(N = 14\); 5.2%)

As Table 6 shows, nearly two-thirds of the news articles on medical marijuana dispensaries expressed negative views. The reasons for this are interesting, as the negative sentiments expressed appear to be a function of the lack of regulatory social controls in California after medical marijuana was legalized.

\(^9\) See also Anderson, 2008.

to the operation of dispensaries, articles in this category focus on medical marijuana dispensaries that were operating illegally and criminal activities associated with illegal dispensary operations, such as possession of unregistered firearms at the dispensaries or robberies of dispensaries (Harris & Maher, 2009; Sweeney, 2009).11 Notably, negative media coverage of dispensaries operating illegally calls public attention to potential dangers surrounding medical marijuana dispensaries. This, in turn, can lead people to oppose having medical marijuana dispensaries in their communities (Sweeney). Some articles from states other than California reference the problems encountered with medical marijuana dispensaries in California and offer suggestions for how legislators and regulators could establish a regulatory framework for the operation of dispensaries that would avoid some of the problems experienced in California (Needham, 2009).

One of the more interesting positive articles concerning medical marijuana dispensaries explained the operations of Oaksterdam University, a school in northern California which teaches students how to grow and process marijuana, use it in baked goods, and manage medical marijuana dispensaries within the boundaries of state law (Lowrey, 2008).

Crime (N = 21; 7.7%)

Separate from crimes related to the operation of marijuana dispensaries, the media also reports stories in which medical marijuana is linked to crime in the community-at-large (i.e., beyond dispensaries). Not surprisingly, all of the cases in this category treated the subject matter negatively or neutrally. Of the 13 articles in this category in which medical marijuana was the key focus of the article, 8 (61.5%) reported on either a robbery or murder.12 Several of these articles describe individuals who were targeted for criminal victimization because they possessed medical marijuana (“Man in Ski Mask,” 2008; Fraley, 2009).

The fact that medical marijuana articles regarding crime are overwhelmingly negative is consistent with other research on media representation of crime (see Chermak & Chapman, 2007; Dowler, Fleming, & Muzatti, 2006; Reiner, 2002). It should be noted, however, that only 21 articles in the research sample (7.7%) addressed a connection between crime and medical marijuana. This suggests that the media is not exploiting any such link through over-reporting, a significant difference from the ways in which media generally report crime.

Miscellaneous (N = 22; 8.1%)

Twenty-two articles in the research sample discussed issues that were not subsumed in the six primary categories in the typology. In spite of the disparate themes raised in these miscellaneous articles, the overwhelming majority of them reported on positive aspects of medical marijuana (see Table 7). Within the miscellaneous category, two themes repeatedly appeared.

First, five of the miscellaneous articles raised questions about the impact of legalized medical marijuana on the workplace.13 For example, state appellate court rulings in California and Oregon previously held that an employee could be fired for testing positive for marijuana (Lane, 2008). Would the same hold true for patients who legally used the drug for medicinal purposes? These articles highlight the need for changes in regulatory and therapeutic social controls to accommodate such users.

Second, in addition to the public opinion pieces discussed earlier which made tax revenue arguments in support of the legalization of medical marijuana, four news articles also made such arguments.14 All four of these articles reported on the debate in Oakland, California where the city council approved a 1.8 percent business tax, or $18 on every $1,000 in gross receipts, earned by Oakland’s medical marijuana dispensaries, a measure anticipated to generate more than $300,000 each year in revenue for the city (Woodall, 2009, p. 7).

Other Factors Shaping the Characterization of Medical Marijuana in the Print Media

Pearson’s chi-Square analyses were performed to detect if media treatment of medical marijuana (i.e., positive vs. negative representations of medical marijuana in newspaper articles) significantly differed under two variable conditions: (1) the president in office at the time the articles were published; and (2) the region of the country in which the newspaper was published

Presidency

As Table 8 illustrates, there was more positive reporting on medical marijuana in the first few months of the Obama presidency than there was during the last few months of the presidency of George W. Bush. A Pearson’s Chi-Square analysis suggests that these differences are significant ($\chi^2 = 4.407; p < 0.05; \phi = .128$).

Region of the Country

As Table 9 shows, there were significant differences in the substantive treatment of medical marijuana in newspaper articles from different regions of the country ($\chi^2 = 11.553; p < 0.01; \phi = .209$). The number of positive articles in the Mid-West and South emphasizes the growing support for medical marijuana throughout the country. The only geographical region in which significant numbers of articles portrayed medical marijuana negatively was the West. This was due to the large number of articles in California newspapers which were critical of the state’s relaxed and inconsistent regulations concerning medical marijuana, most especially with regard to the operation of dispensaries.
The examination of newspaper articles from throughout the country offers insight into the many issues regarding medical marijuana and the ways in which the media represents these issues. Overall, as Table 10 shows, 173 (63.8%) of the articles treated medical marijuana

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**DISCUSSION**

The legalization of marijuana for medical purposes without a solid regulatory framework has created confusion for growers, distributors, and patient-users alike. California’s medical marijuana situation is a prime example of the confusion caused by a lack of regulatory framework. News reports from California repeatedly evidence that the state experiences problems with individuals cultivating marijuana under the guise of medical marijuana while distributing it for non-medical purposes; cultivating marijuana in excess of the amounts specified by the state’s medical marijuana law; and medical marijuana dispensaries operating illegally. These problems demonstrate the need for a more comprehensive framework of regulatory social controls to replace older penal controls.

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Second, shifts in social norms that affect non-penal social controls may not yet have evolved to keep pace with the changes in penal social controls. For example, employers need to figure out how their employees’ use of medical marijuana will affect workplace rules. This very issue was recently highlighted when a Walmart employee in Michigan was fired after testing positive for marijuana. He presented a state card authorizing his marijuana use for sinus cancer and a brain tumor, but he was terminated nonetheless (Bradley, 2010).

Third, changes in formal social controls at the state level have not yet caused changes in formal penal social control at the federal level. While the Obama administration has curtailed federal enforcement of the Controlled Substances Act of 1970 with regard to medical marijuana, the fact remains that this federal law continues to classify marijuana as a Schedule I controlled substance—one which has no currently accepted medical value (DEA, 2009). This significant discrepancy between federal law and the 14 states with medical marijuana laws were key to more than a quarter of the articles in the research sample, collectively demonstrating the need for harmonization of federal and state laws.

**Evolution of Informal Social Controls**

Informal social control of marijuana use has shifted dramatically as the drug has become incorporated into otherwise conventional ways of life in America (Hathaway & Atkinson, 2001). The articles which discussed the passage of medical marijuana laws emphasized positively. This finding, when coupled with the insights gained from a qualitative review of the content of the articles in the research sample, have implications for law and public policy.

**Implication for Law and Social Control**

**Evolution of Formal Social Controls**

Formal social controls regarding medical marijuana have changed significantly since the passage of California’s CUA. Specifically, penal social controls have been minimized as a growing number of states have enacted laws legalizing medical marijuana. The passage of these laws strongly suggests that marijuana use has been transformed, through the process of medicalization, from a deviant act to one which is now generally accepted as a legitimate form of medical treatment. As both medical literature and the popular press increasingly advocate for the medicinal use of marijuana (as evidenced by the articles in this study), formal social controls have shifted, as predicted by Conrad and Schneider (1980; see also Conrad, 1992), from the penal style to the therapeutic style and regulatory style. As the analyses of articles in the research sample illustrate, however, these shifts in the styles of formal social control have created a new set of questions which the law has yet to address through regulatory social controls and revised penal social controls.

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the growing acceptance of medical marijuana. As more states condone marijuana use for medicinal purposes, the social stigma previously associated with the drug is continuously evaporating. The fact that there are many politicians who support medical marijuana, including President Obama, serves as strong evidence of this change in social norms. In fact, changes in drug enforcement policy under President Obama, especially with regard to federal raids on medical marijuana dispensaries and federal prosecutions for the distribution, possession, and use of medical marijuana, appear to have changed the way in which medical marijuana is portrayed in the media. To wit, during the time when President Obama was in office, compared to when President Bush was in office, the articles were significantly more positive ($\chi^2 = 4.407; p < 0.05; \text{Phi} = .128$).

On the other hand, critics of medical marijuana call attention to this shift in social norms and argue that relaxation of formal social controls for medical marijuana have corresponding weakening of informal social controls governing drug use. In fact, the public opinion articles in the research sample repeatedly raised concerns that the legalization of medical marijuana sends the wrong message to youth concerning drug use.

**Policy Implications**

This study offers insight into the issues experienced by states that have medical marijuana laws, as well as states debating whether or not to pass a new law. This research also emphasizes the importance of including provisions for legally acquiring cannabis in new medical marijuana laws (Shaw, 2008).

In order to provide individuals with a way to obtain medical marijuana, it is necessary to develop precise guidelines for cultivation. Guidelines must specify how much marijuana may be grown. Also, the guidelines must address the issues of where marijuana may be cultivated in regards to the proximity of buildings like schools. Of course, medical marijuana dispensaries could provide a place where individuals could receive high-quality marijuana and be able to discuss the product with knowledgeable individuals. However, in order for dispensaries to operate appropriately, a comprehensive set of regulations must be promulgated to avoid the types of problems that California has experienced with its dispensaries.

The current state of limbo that besets this country’s medical marijuana laws sets the stage for gray markets. Gray markets emerge for drugs when a substance occupies the middle space between the rigid ideological poles of prohibition and legalization. Some segments of the market function illegally while other portions of the market operate within the boundaries of the law (Sifaneck & Kaplan, 1995). Gray markets for drugs often emerge when a comprehensive and coherent set of regulatory social controls have not been created or when such controls are not uniformly enforced (see Duke & Gross, 2006; Leuw & Marshall, 1994; Sifaneck & Kaplan). For example, there are many instances in which individuals legally purchase medical marijuana that was grown illegally.

Often the lines of licit and illicit marijuana production and sales are blurred because of current policies. The issue in the United States, especially California, is similar to the current situation in the Netherlands. The existence of coffee shops in the Netherlands, where the selling of cannabis for personal consumption has been tolerated since 1976, has created a gray market. Because these coffee shops needed a supply of marijuana, some countries, like Belgium, increased their domestic cannabis cultivation (Decorte, 2007). Although the cultivation was illegal, the product was eventually being sold legally in Dutch coffee shops (see also Korf, 1990). The Dutch experience with a gray market for marijuana is similar to the gray market which exists in California with regard to illegal cultivation for legal distribution in the form of medical marijuana. To address such gray areas, future policies either need to increase formal social controls (whether penal, regulatory, or therapeutic) of medical marijuana, or relax existing social controls by legalizing marijuana entirely. But, in reality, neither approach would likely eliminate the gray market for marijuana completely.

Consider the consequences of legalization. One of the major reasons behind the drive for legalization is the potential tax revenues (Bussewitz, 2010). If marijuana sales were to be taxed, a number of new questions would arise. What would the tax rate be? Would people be able to grow their own marijuana tax free? How would tax revenues be collected by distributors? Answers to such questions, among others, would require a comprehensive set of regulatory social controls. Full compliance with such rules, however, is unlikely. There still would be a gray market because some people who cultivate marijuana would not comply with various licensure and regulatory requirements, especially those concerning taxation, because compliance would be expensive; thus, some growers would find it more cost effective to illegally cultivate and distribute their crop on the gray market.

**Study Limitations**

Several limitations to this study must be acknowledged. First, the conclusions in this study were drawn based on analyses of a random sample of 321 articles which appeared in U.S. newspapers during a one-year period of time. The time frame was purposefully selected to capture potential attitudinal shifts as one conservative U.S. presidency ended and a more liberal presidency began. Although the sample accounts for 16.62% of the 1,930 articles published in the relevant time period, these articles may or may not be representative of the totality of articles published that year. Similarly, analyses performed on data drawn from a longer time-frame (e.g., the last four years of the Bush presidency compared to the first four years of the Obama presidency) could potentially produce nuances that were not evident when examining only a single year of data. Further research on a larger sample of articles from a longer time period might yield a richer data set upon which more generalizable analyses could be based.

Second, although ethnographic content analysis provides much more rich data than traditional quantitative content analysis alone can do, it still has the limitation of being a review of a fixed medium. In the present study, the media reviewed were newspaper articles. Those articles yield valuable insight into shifts in the American psyche, especially through the lens of agenda-setting theory. However, the data are limited by the time, space, diligence, and biases that the authors of the articles may have brought to their work. Future research on public perceptions of medical marijuana use should include survey and interview data, both of which could provide a more comprehensive understanding of the changing perceptions regarding the research topic.

Third, the data analyzed in this study were limited by the fact that data could be coded only as nominal-level variables. The level of measurement only allowed for the reporting of percentages and Person’s Chi Square analyses. To compensate for these statistical limitations, this study incorporated ethnographic content analysis to provide rich, qualitative
Fourth, content analysis requires the researcher to code data. While guided by the methodological framework of the practice, data coding media necessarily involves some degree of subjective decision-making which can impair the reliability of the study. To minimize this potential limitation, a second researcher coded a random sample of the articles in this study’s research sample. An impressively high level of inter-rater reliability of 97.7% was achieved, suggesting that the potential for coding biases and/or errors in this study is minimal.

**CONCLUSION**

The overall positive treatment ($N=173; 63.8\%$) of medical marijuana in the articles in this study suggests a major transformation has occurred. The news during the height of the “War on Drugs” was concerned with the link between crime and illicit drug use, as well as an attempt to influence people to refrain from drug use for public health reasons. The message today is quite different. Most of the articles reviewed in this study were not concerned with preventing medical marijuana use, but rather focused on nuanced aspects of implementing policies and regulations governing medical marijuana use. With 14 states now having medical marijuana laws, it is important for these laws to be comprehensive and well thought out. It is crucial for medical marijuana laws to offer precise guidelines concerning the many issues regarding medical marijuana, especially cultivation and dispensaries. These guidelines must be enforced in order for them to be effective. The many concerns that are correlated with the passage of a medical marijuana law must be addressed, and it is important for there to be various outlets for individuals to receive information about the several characteristics of medical marijuana. With the proliferation of medical marijuana laws, there is a growing sentiment towards the legalization of marijuana. This potential legalization of marijuana produces various different concerns.

It is imperative to understand that the legalization of marijuana would generate a myriad of issues. In order to limit the confusion and the fears by the general public, it is essential to carefully examine the many aspects that are associated with the legalization of marijuana. One of the major aspects that must be carefully attended to is the potential taxation of marijuana sales. It is important to recognize that the legalization of marijuana would not eliminate the illicit market for marijuana due to the costs associated with regulatory compliance. The gray market notwithstanding, the legalization of marijuana could potentially provide a much needed source of tax revenue and decrease the legal confusion originating from the current marijuana policies. The current policies cannot continue to be stagnant due to the uncertainty of the laws, they must progress one way or the other, and do so with careful planning and execution.

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Major Determinants of Job Satisfaction Among Police Managers

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Turkish National Police Department

Gennaro F. Vito
University of Louisville

William F. Walsh
University of Louisville

George E. Higgins
University of Louisville

Abstract
This research examines the levels of job satisfaction among police managers. The findings indicate that police managers have higher levels of job satisfaction than the research on their line level counterparts indicates. Years of service, feedback on the job, and involvement in COP and/or Compstat programs were significant predictors of job satisfaction among this sample of police managers. It appears that involvement in COP and/or Compstat programs has the ability to enrich the jobs of police managers.

Key Words: Job Satisfaction, Compstat, Community Oriented Policing

MAJOR DETERMINANTS OF JOB SATISFACTION AMONG POLICE MANAGERS

One significant aspect of public sector organizations that has been addressed in recent years is job satisfaction. It has drawn this interest because of the complex issues that face governmental agencies in the coming years due to limited funding and the need for stability. Job satisfaction has an influence on productivity in different ways. As defined by Locke (1976), job satisfaction is a positive state originating from the appraisal of someone’s work or work experiences. Positive changes in working groups, supervision, incentives, and the work itself can increase the productivity and the quality of services in organizations (Argyle, 1972). However, job dissatisfaction can lead to lower productivity, efficiency, effectiveness and poor employee morale (More, et.al. 2006).