A Proposal for Studying Social Media Sentiments about Corrections Reform in the United States

Kimberley Garth-James[*]

Department of Public Administration Program and Center for Public Affairs, Azusa Pacific University, Azusa, United States

ABSTRACT

A qualitative study of 85,000 engagements on Twitter, Facebook, YouTube, and Reddit about corrections reform using the Pulsar social media listening software. The assessment of empirical studies of successful reforms to U.S. corrections, reveal a resurgence of discontent that nothing works (1970s thinking). The results showed a disturbing disconnection between science about what does work in rehabilitation" i.e., assessments, treatment, education, and employment" and the understanding shown in social media discourse. Accordingly, corrections professionals, policymakers, and students need to express informed opinions on social media platforms so that future corrections approaches trade nothing works for what has proved to work.

Keywords: Social media; Corrections; Prisons; Prisoners and Civic Engagement

INTRODUCTION

The advocates of administrative efficiency in corrections (i.e., prisons) have objected to the traditional warehousing of offenders that is characteristic of modern prison management, pointing out that education and training programs have been shown to be more effective in many vsations [1]. Much of the recent discussion of these issues has been taking place on social media, driven in large part by the outcry over police officers' use of excessive force against minority suspects; this discussion has even included attacks targeting police [2]. There are currently around 250 million users of various social media platforms—in particular, Twitter, YouTube, Facebook, and Reddit—in the United States, with a predicted increase of 10 million users by 2023 bringing user penetration to 67% [3]. A significant number of these users' 500 million daily posts share reactions to the killing of unarmed Black suspects such as Michael Brown and Breonna Taylor and to the racism endemic in police departments [4]. Social media technologies help with civic engagement of moral ethical policy dilemmas. The social media discourse extends to critiques of the corrections system as a wasted opportunity for many offenders to gain job, education and increase moral ethical decision-making skills for reintegration into society. Civic engagement through social media regarding corrections reform is captivating to corrections professionals, policymakers, offenders' families and other advocates, employers, journalists, and corrections students interested in administrative reform.

Social media platforms, then, are an important driver of the prison reform agenda in terms of defining and describing problems and measuring the performance of departments of corrections. Public discourse was influential in moving away from predominantly "nothing works" thinking, first, to a focus on the successful reintegration of ex-offenders into homes and communities. Second, and, presently, the discourse is moving toward a "what works" ethos emphasizing rehabilitation. There is widespread agreement among corrections experts that the nothing-works discourse reinforced a "just desserts" mentality and favored brutal retributive punishments (e.g., hard labor, "silent" and "separate" prison activities) that actually increased recidivism [5,6]. The shift in attention away from the traditional "lock'em-up, "nothing-works mentality and practices in corrections occurred in part in response to empirical research findings.

The reinvention of prisons remains a subject of a public discussion that has included thousands of social media users addressing problems with corrections and, in particular, recidivism rates as high as 70%. Efforts to move beyond the mere warehousing of offenders in prisons require the input of both scholars and informed members of the public in the kind of evidence-based decision-making that remains uncommon in corrections. Thus, for instance, prison-managed work programs continue to pay far less than the market wage for skilled work, but joint ventures are reassessing laborers' worth [7]. There is now little doubt that literacy skills and vocational training can improve post-release outcomes for ex-offenders while realizing expectations for social justice as well [8-14]. Thus, while news outlets reveal the negative impact of de-policing, posts on Twitter, Facebook, YouTube, and Reddit point to the real concern on the part of the public regarding that the ongoing need to replace nothing-works thinking with policies that assist prisoners in becoming productive members of society as ex-offenders.

The work to re-envision corrections, then, can begin with a consideration of promising evidence-based rehabilitation strategies for counseling, substance-abuse treatment, job skills training, and so

on presented in the social science literature in light of public opinion manifested on social media platforms. There is a clear need for greater emphasis on bolstering ex-offenders' self-esteem and sense of belonging to a household and community [15-17]. Reconceptualizing corrections administration from the perspective of rehabilitation involves systemic change and assessing the moral and ethical accountability of corrections professionals at all points in their careers. An approach to prison management and prisoner rehabilitation is emerging, then, that combines organizational efficacy with humanitarian considerations within the context of the existing public correctional infrastructure. The focus of this study is on what has been shown to work in efforts to reform U.S. corrections as revealed by the tension between opinions expressed on social media and academic assessments of the situation. The discussion also explores the impact of social media advocacy on decisions about the future of corrections.

Statement of the problem

The problem, then, is the discrepancy regarding the best way forward for corrections in the United States between the assessments of researchers and the individuals involved in the corrections system who discuss their experiences on social media platforms. This discrepancy, on one level, reflects differing views on how best to balance social equity and public safety. Political scientists and social philosophers have tended to envision the delivery of services in distributive terms, as the equitable provision of benefits to organizations and members of a community [9,18]. Civic discourse can improve managing moral ethical dilemmas and behaviors. Thus, policymaking and agenda-setting require political input in such forms as elections, referenda, and town halls to meet the challenges of prison population management [19].

In recent years, administrators involved in policymaking and agenda-setting as well as powerful politicians (including governors and presidents) have been making use of social media as a source of information about social issues, including corrections. These platforms serve as both a gauge of public opinion and a bully pulpit [20]. The interest in prison reform and rehabilitation evident on various social media sites is having an impact on policymaking as user fact-check the claims of politicians and corrections professionals about prison management [3]. The "Ferguson effect", following the social upheaval in 2014 that began in that city in Missouri with the killing of Michael Brown persists through a series of similar incidents, keeping public attention on the systemic racism that continues to plague the U.S. justice system from the moment a suspect is arrested through sentencing and incarceration [21]. The calls on social media to "defund" police departments and dismantle correctional institutions reflect a deeper problem in the United States, namely the loss of citizens' sense of shared humanity and community.

This study involved an examination of posts on Twitter, YouTube, Reddit, and Facebook over a 12-month period from August 2020 to July 2021. A search with the keywords "prison reform", "prison reform and rehabilitation", and "prison and ethics", returned 85,000 discussions relating to prisons and prison reform. Social media have served as a major channel for citizens to express disapproval of the disproportionate imprisonment of members of minority communities among other problems associated with the over-reliance on carceral forms of punishment rather than rehabilitation in the United States.

Theoretical framework and research questions

Cullen, et al. famously argued for the rehabilitative ideal of reforming corrections administration, including the management of prison populations [22]. The use of education, work, criminogenic assessments, and counseling is rooted in the notion that the humanitarian treatment of prisoners is an aspect of the due process rights guaranteed under the 5th, 6th, 8th, and 14th Amendments to the U.S. Constitution. The social media posts have frequently given voice to the sentiment that corrections should not simply house offenders and supported efforts to redress wrongful incarceration and the disproportionate confinement of ethnic minorities. The Sentencing Project reports on trends in the incarceration of Black citizens associated with racism as well as the difficulty of obtaining employment for those undergoing the transition from "criminal" to "citizen" [23].

From a theoretical perspective, researchers have relied on statistical methods to predict and track criminal behaviors, often with a focus on specific populations, especially older and mentally impaired prisoners with limited literacy and skills [24]. The understanding of rehabilitation articulated by Cullen, et al. and Swiss is, in turn, consistent with proposals to improve public management based on risk assessments and counseling for individual offenders desirous of reform [16,25,26]. Thus, corrections administrators have been striving to equip prisoners and ex-offenders with effective decision-making skills as well as, on a larger scale, to address issues relating to systemic racism. By viewing inmates as employees in public-private partnerships and as students in correctional settings, practitioners working with prisoners can promote the sense of integrity and honor necessary for ex-offenders' successful reincorporation into their communities.

The gaps in the literature are notable. In particular, few empirical studies of American corrections and social media are available to inform professionals and students about the areas of agreement and disagreement regarding corrections, social equity, and justice in prison management. To be sure, large amounts of empirical evidence have been collected, and researchers have conducted numerous meta-analyses of efforts to reform the U.S. prison system [15,16,27-31]. A recent study by Christenson, et al. of public opinion and the U.S. president's use of social media is notable for the emphasis on the activism of internet users and agenda-setting [20]. What are needed are studies that use such evidence to identify approaches that work using the latest technology in place of or in addition to more traditional reform methods. Reform programs rooted in spirituality and pastoral ministries have a long history of helping prisoners to acquire the skills to cope with trauma and reenter society that continues to this day [32]. However, such measures tend to be expensive, and there is great desire, and potential, for cost savings in the delivery of rehabilitation programs. As a recent publication by the Marshall Project noted, the costs of social inequity are high, including the "hidden costs" of rehabilitation programs—which tend to receive insufficient funding in corrections budgets [33]. The resulting disproportionate funding of prison infrastructure has left inmates' medical needs unmet.

Thus, the thinking about corrections reform has been evolving rapidly, fueled in part by discussions on social media of the need to focus on offenders' humanity and the reincorporation of ex-offenders into society. These considerations guided the formulation of the following research questions:

• What are the interests of social media users relating to corrections reform?

• To what extent do social media use impact political decision-making relating to social equity and humanitarianism in corrections (prison) administration?

• In what ways does the discussion on social media advance the planning for new future corrections (prison) systems?

AIM OF THE STUDY

Notably, the discourse on social media is consistent with some of the findings in the social sciences literature on penology and corrections administration. Measures of the effectiveness of corrections have often assessed the management of the prison population in terms of the costs of constructing and operating prisons as well as social equity and justice [33-35]. Often, policy planning and corrections agendas have seemed to emphasize revenge and incapacitating offenders. Despite the claims of voices on the fringe, it is not a question of dismantling prisons, for they are a necessary part of the criminal justice system that maintains the social contract between individuals and society. Thus, the question of whether felons should have the right to vote is one aspect of the social contract.

The evolution in the social contract, therefore, has included evolution in prison administration and management. In the 19th century, the silent and solitary systems in the penitentiaries at Auburn, New York, and in Pennsylvania co-existed with the exploitation of inmates in "piece-price partnerships" (i.e., chain gangs) involving harsh labor and spiritual repentance that was justified as retribution. In the 20th century, the emphasis in U.S. correctional institutions shifted to education and counseling, though not necessarily to the humane treatment of prisoners [36,37], perhaps the most influential modern philosopher of modern penology, recognized that imposing on prisoners a regular work schedule supplemented by instruction represented an improvement over earlier forms of incarceration. Efforts to make the U.S. justice system more equitable have, however, been blunted by such partisan political policies and campaigns as the replacement of indeterminate with determinate sentencing, "three strikes" laws, and "truth-in-sentencing".

Modern notions of retributive justice—or revenge justice, to its critics—thus developed at a time when prisons in developed countries were far more brutal. The move to provide offenders vocational instruction and skills for work and life in their communities after incarceration is consistent with the empirical evidence about inmate reform that has become available over the past two centuries [8,38-42]. This evidence suggests that breaking the cycle of crime involves transcending notions of retributive justice and emphasizing morals and ethics, trust, equality, and hope. These are, in fact, the issues that are prominent in social media discussions.

The role of public-private partnerships

The modern public discourse about corrections reform and rehabilitation ideology traces back to the "factories with fences" concept of U.S. Supreme Court Chief Justice Warren Burger, which prioritized counseling, medical treatment, and the acquisition of life skills by prisoners through education and meaningful work [43]. In the 21st century, researchers have noted continuing problems with "the color of justice" in terms of the consignment of persons of color to correctional facilities and their treatment there [44]. The recent nationwide protests such as those associated with the Black Lives Matter movement have advocated for local initiatives that emphasize the humanity of incarcerated people. These efforts are pragmatic and humanitarian, for they often begin with stakeholders asking what works to support the reform goals of individual prisoners and build self-esteem through education and employment, which naturally requires individual effort [24,45,46] Education can increase moral ethical decision-making and

behaving viewed by society as essential to rehabilitation of offenders returning home. Thus, the education programs currently offered in prisons cater to basic, secondary, vocational, and English-as-a-second language (ESL) learners and support a variety of workplace literacy goals [38-41].

Likewise, public-private partnerships (3Ps) and joint ventures have helped to provide real-world skills to those behind bars, thereby reducing recidivism and contributing to the sustainability of prisons [10-14,42] The training projects offered through the Prison Industry Enhancement Certification Program (PIECP), for instance, nurture collaboration between corrections facilities at the federal and state level and private businesses to facilitate the transition from prisoner to employee. Such 3Ps support members of corrections staff—including prison guards, counselors, and educators—while also holding offenders accountable. Effective accountability can involve garnishing a substantial portion of inmates' wages (usually around 40% deduction to savings) to go toward restitution for crime victims and their families as well as prison expenses, thereby lessening the burden on taxpayers [43,44].

To be effective, prison management policies need to take into account the history of theory and practice in the field as well as ethical considerations [45]. Accordingly, Russo, et al. in a study for the National Institute of Justice, wrote of "envisioning" new corrections with "promising solutions" for offenders inside and outside prisons, which must be "smaller and safer facilities" that are resource-rich and focused on "preparing inmates for release and meeting public safety goals[46,47]. Enhancing corrections requires a holistic approach. Such an approach can draw strength from the efforts of social media activists to envision a humane carceral experience. Thus, the discourse on social media tends to be opposed to the death penalty and the confinement of prisoners in "cages".

Social media and accountability

There has, then, been a general trend in the corrections research toward a focus on social equity in relation to political agenda-setting in justice and penal policy studies and, in particular, to race and ethnicity [19,48,49]. The public opinion expressed on social media has tended to be critical of the emphasis on punitive corrections associated with "zero-tolerance" enforcement policies and the aforementioned "three strikes" laws. At the same time, social media have helped to identify a range of political and cultural contexts for conceptualizing future corrections—or, at least, this seems to be a reasonable conclusion from the perspective of one inside the system; research is needed to determine whether this is, indeed, the case. It is self-evident that social media listening tools serve to raise awareness of pressing social issues. Such as the over-reliance of prisons on the warehousing of offenders and the wide range of technologies available to facilitate rehabilitation efforts (e.g., eLearning and virtual workplaces).

Accountability, humanitarianism, and ethics remain central to the administration of U.S. corrections systems because the evidence is compelling that these values support effective reform policies. The literature on social media communications over the past few years shows a promising move toward humanitarian strategies for correctional institutions, in particular, those for confronting the obstacles to gainful employment for ex-offenders [50]. Thus, some programs targeting parolees have shown as much as 60% reductions in recidivism rates. Prisoners' self-esteem can be bolstered without sacrificing individuals' accountability to victims and the communities to which ex-offenders return. Likewise, correctional systems can be held accountable to

corrections professionals, taxpayers, and other stakeholders. The efforts by social media users highlight injustices in corrections as well as the need to develop a keen and exact sense of why prison reforms succeed or fail. Without accountability, the cultural values that the system is intended to reinforce are thrown into confusion as prisoners and ex-offenders, their families and other members of the community, and corrections professions suffer a range of negative effects owing to the paucity of rehabilitation resources. Convergences and divergences in penal policies depend on the cultural context, while the established norms and the vision of corrections at the federal and state levels place heavy burdens on staff members who, by and large, remain committed to better outcomes for prisoners after they are released back into their communities.

The accountability of corrections systems is assessed based on the resources available to individual prisoners. These resources include risk-need technologies for specific prison populations (e.g., women) and inter-linked information systems so that corrections professionals can implement "what works" for reentry plans. When it comes to parole preparation programs that reduce recidivism by providing education and training to practitioners and generally helping to fulfill the mission of rehabilitation, it is time to turn away from penology informed by calls for retribution toward policies rooted in "faith in prison's curative powers" [22,51]. There remains a need for research that challenges conventional ideas about work and education for individual offenders and provides guidance regarding the conditions that promote correctional supervision programs that have proved to help parolees (ex-prisoners) to find work. Among recent efforts in this regard, the National Institute of Justice funded research about work and education programs, in particular joint ventures (i.e., 3Ps), over the period from 2010 to 2018. These grants funded empirical studies that informed students and practitioners regarding penal philosophies, resources, and issues that an ethical progressive lens can resolve [21,28,49,52]. heir work is inspiring millennials, new members of the corrections profession, and mid-career professionals anxious to implement meaningful reform. Therefore, there is some cause for optimism and reason to believe that the situation is, indeed, changing "from nothing works to what works" as predicted [22,53].

Social media and social equity

Social equity in the delivery of corrections education programs is discussed on the social media sites Twitter, Facebook, Reddit, and YouTube. Specifically, the comments call for provision of these services. The criticism of these programs reflects the importance of correctional education (e.g., helping prisoners without high school diplomas to earn GEDs) and vocational learning (i.e., workplace skills and literacy and college preparation), issues to which the literature in the 1990s failed to draw sufficient attention. Thus, the collective opinion represented on social media has the potential to counter policies such as those preventing prisoners from accessing Pell Grants policies for college study—which Batiuk, et al. described as "ill-conceived"—that are implemented by politicians who listen to lobbyists rather than the empirical evidence [54]. There is some reason for optimism in this regard; worldwide, the social media platforms have been helping activists to overcome inertia and organize to urge governments to abandon ineffective conventional strategies in favor of promising new ones.

As a result of public pressure, national leaders have begun to consider corrections reforms to address issues relating to racism and mistreatment of prisoners as well as education and post-incarceration

employment [55,56]. Again, the strategies associated with reentry and recidivism reduction in the extant literature have paralleled the sentiments expressed by social media users [57-60]. Likewise, corrections professionals entering the field want to feel a sense of accomplishment.

U.S. correctional educators, then, have been making the case for vocational education, literacy and ESL classes, and whole-life instruction including substance abuse treatment, anger management, and child and family counseling [10-13,42,61]. Their arguments in this regard are consistent with those found in the present study of social media expressions on Facebook, Twitter, and Reddit over a 30-day period in 2021 supporting prison reform programs. Importantly, according to a 2020 U.S. Federal Bureau of Prisons report, prisoners have recently been returning home with more self-confidence, and correctional professionals have had greater confidence in working with them. This outcome seems attributable, at least in part, to additional resources and a new mission for U.S. corrections rooted in the notion that the rehabilitation of prisoners can enhance public safety [62-64].

METHODOLOGY

The methodology for this study was qualitative, involving analysis of the content of social media expressions and data in the public domain. One aim of this research was to assess the best practices for nurturing an environment of accountability and adherence to ethical norms by corrections professionals working to realize meaningful reform goals. The analysis of discussion on social media of corrections and prison management reform focused on expressions and slogans appearing on the four main social media platforms in the United States—again, Twitter, YouTube, Facebook, and Reddit—that served to identify users' attitudes on the key issues. Social media users form groups based on shared opinions. The communication among the members of such affinity groups is a source of qualitative and quantitative data that software captures (Pulsar Social Media Listening platform), which many academic researchers find useful to monitor public opinion. The methodology used in this and similar studies involves reviewing and summarizing social media expressions and noting the emotional content, including Emoji pictures (thumbs-up, hearts, and smiley faces) which, indeed, proved labor-intensive. Exploratory content analysis of this sort is well established as a valid research design [65,66].

In 2021, we began with a search of the national social media platforms Twitter, YouTube, Facebook, and Reddit over a 155-day period in 2020 using terms related to prison reform that returned 19,700 posts. These included tweeting dislikes of housing prisoners in "cages," inhumane treatment, and defunding of prisons. The search terms thus included "prison reform," "prisoner rehabilitation," "corrections reform," and "prisoner reform." The timeframes were 30 days, 6 months, and 12 months (Facebook's data reporting window is 30 days). The search was conducted in the United States.

The next step was filtering of the original search using the terms "work, education," "work or education," "morals or ethics," and "work, education, morals, or ethics." The choice of these terms reflected statements by social media site users about prison management and, in particular, inadequacies in the programs and services that prisoners receive. The data were cleaned by removing images, leaving only users' comments about issues relevant to this study. Another search of a 30-day period in 2021 using the same keywords showed an increase in the discussion of prison reform on the four social media platforms, with an additional 488 posts on Facebook. Overall, interest

was continuous. Prison affinity groups were particularly prominent on YouTube, attracting numerous pointed comments about the need to make prisons more effective and humane. Notably, Reddit users focused on non-violent offenders. These social media users, then, addressed the efficiency, morality, and ethics of professionals who work with prisoners and rehabilitation and even the notion of defunding prisons and rendering them obsolete. The methodology for the study, accordingly, also involved analysis of information in the public domain in library databases such as JSTOR, ABI/Inform, with statistical analyses performed using Intellectus Statistical software.

RESULTS

The analysis of the expressions on Facebook, Twitter, YouTube, and Reddit served to address the research questions regarding the extent of social media communications about corrections reform, ethics, and rehabilitation. Figure 1 shows the volume of expressions, totaling 85,000 posts and engagements, for the 12-month period on Twitter, YouTube, and Reddit (February 3, 2020, to February 3, 2021) and additional 488 Facebook posts from for a 1-month period (January 3-February 3, 2021). The search terms were "prison reform, rehabilitation," "prison reform," "prison reform, rehabilitation," and "prison reform, ethics or morals," and the filters were "work, education".
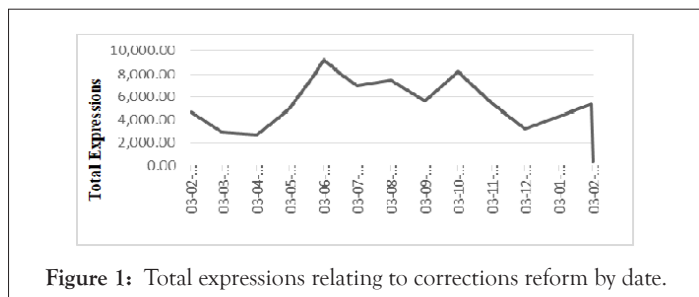

Figure 1: Total expressions relating to corrections reform by date.

In February 2020-February 2021, over a 30-day period such as from May-June 2020, the expressions in posts and engagements on forums on the topic averaged 284 daily. These expressions include buzzwords "prisons are inhumane" and "reform prisons, social justice".

The graph in Figure 2 shows the number of expressions over the six-month (155-day) period from September 8, 2020, to February 7, 2021, for the four platforms. The aforementioned search terms yielded 25,300 posts and engagements on forums.
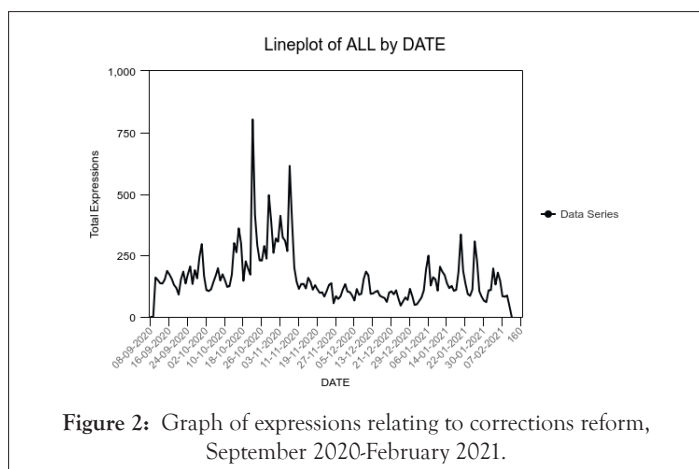

Figure 2: Graph of expressions relating to corrections reform, September 2020-February 2021.

On average, 159,670 expressions (Emoji) appearing monthly on social media sites, indicated an interest corrections reform and rehabilitation. The frequency peaked during October 2020 and in February 2021, indicating the periodic resurgence of interest in the subject. Emotional

content (expressions using emoji hearts, thumbs up/down, happy/sad and neutral faces) do reinforce the moral and ethical expressions accompanying written opinions about corrections.

Pulsar uses a "sentiment scale" rating to summarize emotional content based on the frequency of emoji and words such as "trust", "good", "bad", "anger", "happy", and "disgust". The scale ranges from -50 to +50 and served in this study to represent the emotional content of posts. The ratings took into account buzzwords such as "prisons punishing people is bad", and "prisons are cages", and again, thumb up/down (likes, dislikes) and faces (frown, happy, neutral). The dashboard summarizes the volume of expressions related, in this case, to moral and ethical language (-35). The 85,000 posts, discussions, engagements, expressions (Emoji, other) generated 9.6 billion impressioins (sentiments) representing emotional content (words, Emojis) about corrections reform in 50,000 mentions (engagements) over the 12-month period (February 3, 2020, to February 3, 2021; the Facebook posts added the 30-day period in 2021). Some impressions had up to 7 sentiments per one mention (Figure 3).

Figure 3: Dashboard sentiments on prison reform and ethics.

Coding of the qualitative data served to analyze the language of interest for the study in terms of expressions, mentions (likes, dislikes), and opinions in the posts and on forums on the subject of corrections reform. Summary statistics were calculated for education, and the cases were weighted using the moral ethics variable. The observations for education had an average of 179.67 (SD=83.79, SEM=24.19, min=30.00, max=363.00, skewness=0.64, kurtosis=0.07). When the absolute value for skewness is greater than 2, the variable is considered to be asymmetrical about its mean. When the value is greater than or equal to 3, then the distribution of the variable differs markedly from a normal distribution in its tendency to produce outliers [67].

Figure 4 shows total cases for work, education and moral ethics for comments in February 2020 to February 2021, for social media sites Twitter, Reddit, YouTube and Facebook (30-days evaluations in 2020 and 2021 are in totals).
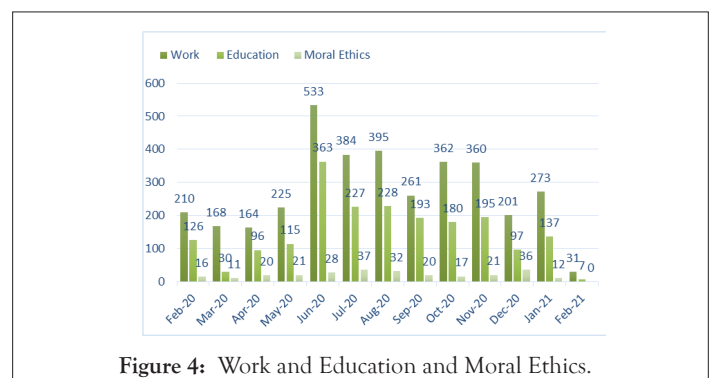

Figure 4: Work and Education and Moral Ethics.

Assuming a connection between each work and morals/ethics (e.g. words/sentiments such as good, trust, justice, among others) as defined by Pulsar, were tested for a monotonic relationship by the Spearman correlation. Figure 5 presents the scatterplot of the correlation. A regression line was added to assist the interpretation.
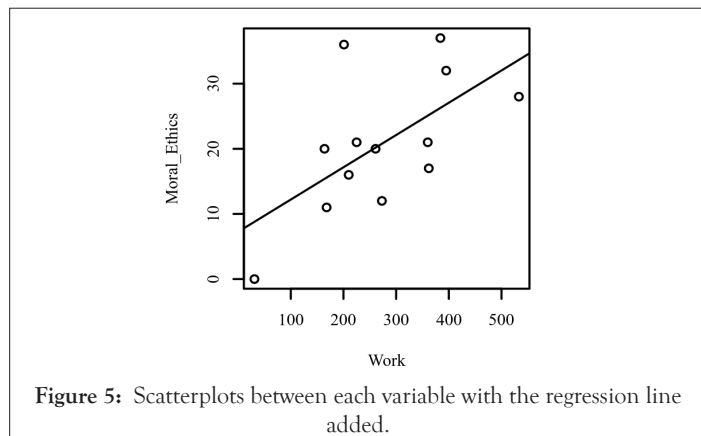

Figure 5: Scatterplots between each variable with the regression line added.

The result of the correlation was examined at an alpha value of 0.05. A significant positive correlation was observed between work and moral/ethics (rs=0.57, p=043, 95% CI [0.02, 0.85]). The correlation coefficient between Work and Moral Ethics was 0.57, indicating a large effect size. This correlation indicates that as work increases so does moral/ethics (Table 1).

Table 1: Spearman correlation results between work and moral ethics.

Combination	rs	95% CI	p
Work-Moral Ethics	0.57	[0.02, 0.85]	.043

Note: n=13

The results of a Pearson correlation coefficient (alpha value of 0.05) between work and moral ethics (rp=0.62, p=.025, 95% CI [0.10, 0.87], Note: n=13), indicates a large effect size. The results of the correlation (using an alpha value of 0.05) examined the correlation between education and moral ethics showed a significant positive correlation was observed (rp=0.61, p=.028, 95% CI [0.08, 0.87]. This correlation indicates that as education increases, moral ethics tends to increase (Table 2) (Figure 6).

Table 2: Spearson correlation results between education and moral ethics.

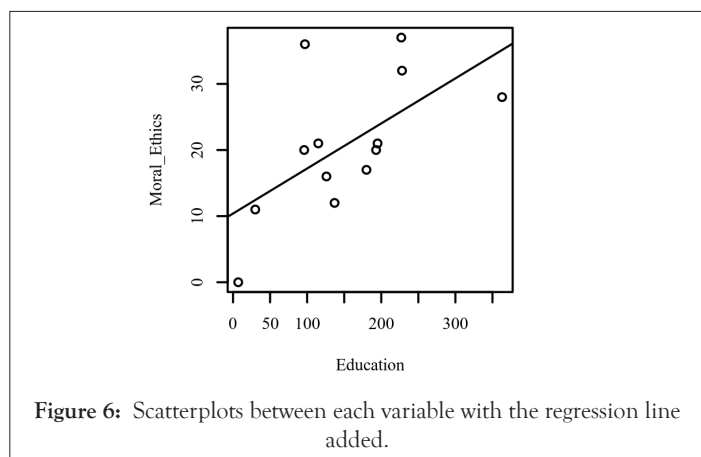| Combination	rs	95% CI	p
Education-Moral Ethics	0.61	[0.08, 0.28]	.043

Note: n=13

Figure 6: Scatterplots between each variable with the regression line added.

A random sampling of 1,500 words/short phrases of participants on the four social media sites for the three-month periods from April to June 2020 and October to December 2020 as well as Facebook commentary for the period from January-February 2021 are shown in Table 3.

Table 3: Prison reform anecdotes for FY 2020-2021.

Number of Participants	Expressions (summary language on websites)	Time Period	Social Media Site(s)
921	Shame justice system sending innocent African-Americans to jail/prison. How can want prison reform if billionaires are exploiting minorities? President done for Blacks was to pass the Prison Reform bill. No trust in decision makers for prison reform. Need jobs for prisoners. Give prisoners a second chance (more chances). Rights of prisoners. #prisonreform.	April-June, 2020	Twitter, YouTube, Reddit
16	Focus on reform. Give people back their rights. Prisoners are increasing as mentally ill in-patients in facilities. No slavery in private prisons.	April-June, 2020	Twitter, Reddit
22	Prison reform now. Problem is unemployment of prisoners. Rehabilitation is good.	April-June, 2020	Twitter, Reddit,
50	Work on the Prison Reform bill. Industrial prison system for Blacks and Latinos, criminal justice reform is slavery, reparations, need prison reform.	April-June, 2020	Twitter, Reddit
25	First Step Act gives non-violent convicts early release. Focus on justice. Focus on human rights. Prisons unjust. There is injustice in prisons. Focus on housing. Focus on education. Need prison reform.	October-December, 2020	Twitter, Reddit
11	Federal penitentiary is bad. Make healthcare available to prisoners. Prisons are cages.	October-December, 2020	Twitter, Reddit
200	Huge opportunity to invest in our prisoners. Use opportunity zones (work is good). Talked about prison reform but never did it. Reduce unemployment for Blacks. Give education to prisoners.	October-December, 2020	Reddit, Twitter

104	Do something good for society and reform prisons. Change drug laws. No prisons. Defund. Believe in human resilience with help for prisoners. Right thing to reform prisons.	Sept 2020-February, 2021	Twitter, YouTube, Reddit
3	Prison abolition. Burn it all down.	January-February, 2021	Facebook
148	Prison reform is right. Prisoners need work and education. Prisons need reform. Inhumane prisons. Murders need prison, not nonviolent criminals.	January-February, 2021	Facebook

DISCUSSION AND RECOMMENDATIONS

The phrases used to describe prisons were mostly negative, describing them as "bad" places and "cages" holding prisoners in need of "help" and "reform." The search results included a few positive expressions, for instance, regarding the positive impact of Pell Grants on education outcomes, redivisim reducation programs, and services such as PIECP work programs, vocational training, and counseling. Moral ethical statements using the Pulsar Sentiment Scale will rate emotional content expressed in emoji and words (happy, bad, among others). There is a large effect size for relationships between work and moral/ethics (r=57) and education and moral/ethics (r=.62) based on the definition in Pulsar, indicating a role of education and work on morality. Social media users' comments about giving offenders a second chance and expressive emojis (thumbs up, happy faces) indicate civic engagement about helping others and reflect humane and socially oriented ideals. Trust, such as the public trust, treating ex-offenders as citizens returning home, helping non-violent offenders, and abolishing the death penalty were expressed opinions that received thumbs up. re-tweets and emojis. The table does not indicate the extent of peer interactions regarding any particular expression or in relation to gender. A few anecdotes on Reddit included opinions suggesting that prisons undermine ("demoralize") social justice ideals. The posts by hashtag activists writing for stakeholder groups were especially thought-provoking.

The assumptions of normality for the six-month data (Figure 2) used the Shapiro-Wilk test to determine whether a positive rating (despite a negative Pulsar rating) would be possible in a normal distribution [68]. The results were significant based on an alpha value of 0.05, W=0.40, p<.001, indicating that a positive rating was unlikely to have been produced by a normal distribution on social media with the search criteria used in this study, therefore violating the normality assumption for positive engagements and expressions.

The assumptions of normality were tested using a two-tailed, one-sample z-test to determine whether a probability distribution with a mean of 0.05 could have produced a positive rating. The results were significant based on an alpha value of 0.05, z=4.66, p<.001. The null hypothesis was, therefore, rejected since the mean of the distribution was greater than 0.05 (Table 4).

Table 4: Two-tailed one sample z-test for the difference between positive and 0.05.

Variable	M	SD	μ	z	p
Positive	47,797.03	127,611.02	0.05	4.66	<.001

Note: n=155

The quantitative and qualitative data expressions and emotional content collected by Pulsar Social Media Listening (i.e., the sentiment scale) showed statistically significant variations. The negative sentiment represents the conceptualization of prisons as inhuman cages unable to help prisoners achieve their rehabilitation goals. Regarding generalization of findings, the present study should be useful to policymakers and corrections administrators considering a new correctional system consistent with norms of humane treatment and the public interest. There is a desperate need for rehabilitation resources and a moral and ethical culture in corrections that provides for the accountability of both prisoners (e.g., through pastoral education and counseling) and corrections officials (based on their efficient achievement of their mission and goals).

Study questions

The aim of this study was to assess the extent of social media users' interest in issues relating to the administration and management of correctional institutions. The specific platforms considered were Twitter (tweets), Facebook, YouTube, and Reddit, which have functioned as a public sphere for the expression of sentiments (likes or dislikes), slogans, and full-blown discussions (Reddit) about prison reform and, in particular, ethics and the role of work and education. Data collection for 12- and 6-months periods for all platforms (except Facebook, which is 30-day collection) and evaluations did reveal civic engagement through social media is ongoing. Sentiment ratings served to provide an overview of the data. The volume of engagements in forums (affinity groups) and mentions (tweets, likes, and dislikes) reflected public interest in the subject. It appears that communication through social media has, indeed, been influencing public opinion regarding the integration of humanitarian principles into the administration of correctional institutions by allowing for frank discussions of their shortcomings. The qualitative words/phrases generated re-tweets, and social media conversations about the purpose of prisons to rehabilitate or punish. This debate has challenged policymakers for decades. Social media technologies show the potential for sharing opinions about moral ethics in decision-making processes about rehabilitating (or punishing) lawbreakers.

The discussion on social media indicates that the disagreements about the relative merits of rehabilitation and punishment in the corrections literature are at odds with public opinion. It is unclear, though, how public opinion might become better aligned with the evidence in the literature. Politicians who engage in knee-jerk policymaking to satisfy constituents may create more inequities. Corrections staff seeking to improve the situation need resources to make effective decisions about the delivery of programs and service to individual inmates. The U.S. Federal Bureau of Prisons is well aware of the potential of rehabilitation schemes to reduce recidivism. Otherwise, policies that undermine the confidence of corrections professionals may result in token efforts or encounter resistance [69].

Undeniably, the social media expressions have value regarding the link between reduced recidivism and education, work programs, and deserve consideration in conceptualizing a better future corrections (prison) system [70]. For too long, the research about modernizing prisons through the adoption of a philosophy of rehabilitation and restoration has been ignored. The discussion on social media is crucial for shifting the vocabulary of the discussion from "released prisoners" to "citizens are returning home" as a way to humanize them. As John Rawls and other scholars have rightly observed, the principles of justice include both a procedural step to help offenders achieve reform goals and a proportional reward for individual effort [71-76].

RECOMMENDATIONS

Redressing the injustices resulting from the dominance until recently of the "lock 'em up" mentality is a particular concern among millennial activists. The disproportionate funding of correctional security staff and management compared with "curative" programs thus remains a perennial concern. The funding disparities are similar at the state level. In addition, limiting misinformation and self-promotion efforts is necessary for a new vision for corrections rooted in truth, empathy, and accountability to take shape. The discussions among stakeholders on social media, however, show a lack of accurate knowledge about corrections budgets; thus, the U.S. Federal Bureau of Prisons reported that costs for the 2019 fiscal year totaled about $7.1 million, representing an increase of 0.8% over the previous year. Breaking down this sum by program, pastoral programs cost $48,149, education and vocational programs cost $148,335, and unit management, including vocational and life-skills training, cost $468,222 (p. 19). Users of social media overall, however, show a strong preference for rehabilitation over punishment [69,77-82].

There is, then, a need for further research into social media as a space for prison administrators and staff members as well as prisoners, ex-offenders, and their families and other stakeholders to share and discuss news and promote education and activism. One key issue is, of course, the funding for rehabilitation; buy-in from corrections professionals eager for reform is another. Further, consideration is needed of the perspectives of and interactions among practitioners (prison administrators), whose attitudes and actions ultimately decide the pace of reform. Insights into the policymaking (agendas, budgets) and philosophical constraints on the efficient preparation of offenders for successful reentry can inform improvements in the curricula delivered to students who are preparing for careers in criminal and justice administration [83-89].

CONCLUSION

All stakeholders in the reform of the justice system can benefit from the sharing of relevant knowledge through social media. Activists can improve the prospects for the incarcerated by engaging with departments of corrections in the pursuit of policies that combine concern for the overall well-being of the community with concern for the social, economic, and spiritual well-being of offenders and ex-offenders. Attempts to re-center corrections on accountability and ethics—in particular, renewed efforts to minimize racial inequities—naturally depend on the readiness of practitioners. Today's corrections professionals may not have been responsible for implementing the administrative rules and regulations associated with the old prison management model, but they have been enforcing them and, going forward, will need training and moral support to adapt to new models. Social media provide a powerful tool for reaching and interacting with policymakers and stakeholders to encourage engagement and reform of prisons. Further research is necessary to determine how social media technologies can influence the understanding of prisoner rehabilitation through work and education and the implications for the victims of crime, the families of lawbreakers, and the community as a whole.

ACKNOWLEDGEMENTS

DISCLOSURE STATEMENT

The author declares that she has no conflicts of interest related to the research, authorship, or publication of this article.

REFERENCES

1. Martinson R. "What works?" questions and answers about prison reform. The Public Interest. 1974; 35(1): 22-54.

2. Mihalek D, Frankel R. The dangers of social media for law enforcement take center stage amid series of scandals: Analysis. 2019.

3. Marrow S. Social and News Media's Effects on Law Enforcement. 2019;1(4).

4. Shapiro A, Sullivan B, Fuller J. As the nation chants her name, breonna taylor's family grieves a life "Robbed."

5. Von Hirsch A. The" Desert" model for sentencing: Its influence, prospects, and alternatives. Soc Res: An Int Quarterly. 2007;74(2): 413-434.

6. Bowers W, Pierce G. Deterrence or brutalization: What is the effect of executions? Crime Delinq. 1980; 26(4): 453-484.

7. Fourth-quarter prison industry enhancement certification program certification & cost accounting center listing.

8. Allewine H. Andragogical methods and readiness for the correctional ged classroom. J Correct Educ. 2010; 61(1): 9-22.

9. Frederickson HG. Public administration and social equity. Public Adm Rev. 1990; 50(2): 228-237.

10. Hughs E. Education in Prison. Routledge. 2016.

11. Moses M, Smith C. Factories behind fences: Do prison real work programs work? NIJ Journal. 2007; 257.

12. Smith A. Momentum for Prison Education.

13. Waintrup M, Unruh D. Career development programming strategies for transitioning incarcerated adolescents to the world of work. J Correct Educ. 2008; 59(2):127-144.

14. Wright B, Zhang S, Farabee D, Braatz R. Prisoner reentry research from 2000-2010: Results of a narrative review. Criminal Justice Rev. 2014; 39(1): 37-57.

15. Andrews D. The risk-need-responsivity (rnr) model of correctional assessment and treatment. 2012. Dvoskin J, Skeem L, Novaco W, Douglas K. Using social science to reduce violent offending. Oxford University Press. 2012;127-156.

16. Cullen F, Gilbert K. Reaffirming rehabilitation: Crisis in criminal justice policy. Anderson Publishing. 1982.

17. Koenig L. Financial literacy curriculum: The effect on offender money management skills. J Correct Educ. 2007;58(1): 43-54.

18. Rawls J. A Theory of Justice. Belknap Press.

19. Kingdon J. (1997). Agendas, alternatives and public policies. Longman Publishing Group. 1985; 4(4): 621.

20. Christenson P, Kreps E, Kriner L. Contemporary presidency: Going public in an era of social media: tweets, corrections, and public opinion. Pres Stud Q. 2021; 51(1): 151-165.

21. Garland B, Spohn C, Wodahl J. Racial disproportionality in the american prison population: Using the blumstein method to address the critical race and justice issue of the 21st century. Justice Policy Journal. 5(2): 1-42.

22. Cullen F, Gendreau P. The effectiveness of correctional rehabilitation. In the american prison 1989. Springer.1989; 23-44.

23. Stevens A. The returning citizen: A public justice perspective on reintegrating the formerly incarcerated. 2019; 9(4): 1-7.

24. Excuse, Justification and Exculpation in Criminal Law.

25. Swiss J. Public management systems: Monitoring and managing government performance. Pearson. 1991.

26. Hannah-Moffat K. Criminogenic needs and the transformative risk subject: Hybridizations of risk/need in penality. Punishm Soc. 2005;7(1): 29-51.

27. Futschek G, Kalinyaprak H, Kargl H. Rehabilitation of prisoners via e-learning. Eighth IFIP World Conference on Computers in Education. 2005: 1-7.

28. Cullen F, Gendreau P. The effectiveness of correctional rehabilitation. In: The American Prison. 1989. 23-44.

29. Quigley W. Prison work, wages and catholic social thought: Justice demands decent work for decent wages even for prisoners. Santa Clara Law Rev. 2004; 44(4): 1159-1178.

30. Visher C, Winterfield L, Coggeshall M. Ex-offender employment programs and recidivism: a meta-analysis. J Exp Criminol. 2005;1: 295-316.

31. Zoukis C. Prison work programs: "cost-effective labor pool" or "slave labor of yesterday"? Prison Legal News. 2019.

32. Religion in prisons: a 50-state survey of prison chaplains. PEW Research Center. 2012.

33. Marshall Project. The Hidden Cost of Incarceration. 2019.

34. Sentencing Project. Trends in U.S. Corrections. 1925-2018.

35. 2006 and beyond: Financial crisis and response. U.S Federal Reserve Education Resources. 2019.

36. Orland L. Houses of darkness. Free press. American Pol Res. 1975; 5(1):119-122.

37. Foucault M. Discipline & punish: The birth of the prison. Johns Hopkins University Press. 1974; 11(4): 509-514.

38. Police: Social media surveillance. Brennan Center for Justice. 2019.

39. Demaeyer E. Education in Prison. Convergence. 117-129.

40. Gee J. Education in rural county jails: Need versus opportunity. J Correct Educ. 2006; 54(4): 312-326.

41. National center for education statistics. National Assessment of Adult Literacy (NAALs) Prison Literacy Component. 2003.

42. Stephen C. Understanding how adult educators apply andragogy in a correctional educational setting: A Case Study. 2012.

43. Burger W. Prison industries: Turning warehouses into factories with fences. Public Adm Rev. 198; 45: 754-757.

44. Nellis A. The color of justice: racial and ethnic disparity in state prisons. 2016.

45. Andersen A, Nava N, Cortez P. The conduits and barriers to re-entry for formerly incarcerated individuals in san bernardino. J Prison Edu and Reentry. 2018;5(1): 1-17.

46. Gagliardi P. Exploring the Aesthetic side of Organizational Life. In S.Clegg S, Hardy C, Nord W. The handbook of organization studies. Sage Publications.

47. Russo J, Drake G, Shaffer J, Jackson B. Envisioning an alternative future for the corrections sector within the U.S. Criminal Justice System. 2017.

48. Marion N, Oliver W. Public policy of crime and criminal justice. Prentice Hall. 2012.

49. Walker S, Spohn C, DeLone M. The color of justice: race, ethnicity and crime in america. Wadsworth Publishing. 2000.

50. Szifirs K, Fox C, Bradbury A. A realist model of prison education, growth, and desistance: a new theory. J Prison Edu and Reentry. 2019;5(1): 41-62.

51. Gehring T. Recidivism as a measure of correctional education program success. J Correct Edu. 2000;51(2): 197-205.

52. Gendreau P. Generating rational correctional policies. Corrections Management Quarterly. 2000; 4(2): 52-60.

53. Gendreau P, Ross R. Revivification of rehabilitation evidence from the 1980s. Justice Quarterly. 2006; 4: 349-407.

54. Batiuk M, Lahm K, McKeever M, Wilcox N, Wilcox P. Disentangling the effects of correctional education: are current policies misguided? An event history analysis. Criminol Crim Justice. 2005;5(1): 55-74.

55. Correctional Education.2019.

56. Echiner M. Prison education: Observing pell grants through the lens of two presidential administrations. 2017.

57. Champion N, Noble J. What is prison education for? A theory of change exploring the value of learning in prison. Prisoners Education Trust. 2016.

58. Coates S. Unlocking potential: A review of education in prison. 2016.

59. Hall R. Technology education and the felon: Teaching high school behind prison walls.1990.

60. Tolbert S, Klein M. Correctional education: Getting the data we need. J correct edu. 58(3): 284-294.

61. Silva J. Corrections in Japan. The Encyclopedia of Corrections. 2017.

62. Gathright J. Tablets offer educational opportunities in prison, but quality varies.

63. The Case for correctional education in U.S. prisons. RAND Corporation.

64. Excellence in economic education act. U.S department of education. 2003.

65. Creswell J, Creswell J. Research design: Qualitative, quantitative, and mixed methods approach. Sage Publishing. 2017.

66. Hollywood J, Vermeer M, Woods D, Goodison S, Jackson B. Using social media and social network analysis in law enforcement. RAND Corporation. 2018.

67. Westfall P, Henning K. Texts in statistical science: Understanding advanced statistical methods. Taylor & Francis. 2013.

68. Razali N, Wah Y. Power comparisons of shapiro-wilk, kolmogorov-smirnov, lilliefors and anderson-darling tests. Journal of Statistical Modeling and Analytics. 2011; 2(1): 21-33.

69. Prison reform: Reducing recidivism by strengthening the federal bureau of prisons. U.S Department of Justice Archives. 2020.

70. Kemp J. Johnson M. The Effect of Educating Prisoners. 2003.

71. Etzioni A. Communitarianism revisited. Journal of Political Ideologies. 2014;19(3): 241-260.

72. Holley P. The latest YouTube craze? Videos that Show You What it's Like to Live in Prison.

73. Intellectus Statistics [Computer software]. (2021).

74. Ocasio-Cortez A. Mass incarceration is our american reality. It is a system whose logic evolved from the same lineage as Jim Crow, American Apartheid & Slavery.

75. Black lives matter surges on twitter after george floyd's death. PEW Research Center.

76. Sexton G. Work in american prisons. National Institute of Justice. 1992.

77. Shafritz J, Hyde A. Classics of public administration. Cengage. 2017.

78. Statista.Com. Share of U.S. Population that Currently uses Social Media.

79. Travis J, Solomon A, Waul M. From prison to home. Urban Institute Report. 2001.

80. Reforming sentencing and corrections policy. Urban Institute. 2016.

81. How much america's biggest counties spend on police. USA Facts. 2020.

82. U.S. Bureau of labor statistics. Occupational outlook. 2018.

83. Prison industry enhancement certification program guidelines. U.S. Bureau of Justice Assistance. 2018.

84. Education and correctional populations. U. S. Bureau of Justice Statistics. 2003.

85. Prisoners in 2019. U.S Bureau of Justice Statistics. 2020.

86. Prisoners report 2017. U.S Bureau of Justice. 2019.

87. Education programs. U.S Federal Bureau of Prisons. 2020.

88. Western B, Kling J, Weiman D. The Labor market consequences of incarceration. Crime Delinq. 2001;47(3): 410-427.

89. Council of economic advisers report: return on investment in recidivism reducing programs. 2018.