

TESTING PRISON INMATES FOR ENTREPRENEURIAL APTITUDE

Matthew C. Sonfield
Hofstra University

Robert J. Barbato
Rochester Institute of Technology

ABSTRACT

A pilot study of prison inmates was conducted to measure their entrepreneurial aptitude, with the objective of determining whether self-employment training for such inmates would be of value. Statistical analysis of the collected aptitude data, measured by Miner Sentence Completion Scale-Form T testing of task motivation, indicates that these inmates have such a propensity, at a level comparable to or higher than samples of currently practicing entrepreneurs. Since a major cause of inmate recidivism is the inability of ex-convicts to obtain employment, then if prison inmates have significant entrepreneurial propensity, it follows that self-employment should be considered a valid alternative path for ex-convicts. Self-employment training would facilitate inmates' movement along this path. Further, and more probing, research is suggested.

INTRODUCTION

Recent experiences of small business specialists have indicated that prison inmates may possess high levels of entrepreneurial aptitude (Sonfield, 1992). Concerned about the lack of employment opportunities for inmates when they are released from incarceration, in the past few years, prisons have invited professionals from the U.S. Small Business Administration, universities, and other organizations to speak to inmates in prisons about the pro's and con's of self-employment upon release. According to one group of these professionals, the inmate response to their presentation was "absolutely amazing" and "gratifying and enlightening." The inmates' questions were very intelligent, and indicated an understanding of the nuances of the world of small business. Specific questions about possible types of businesses seemed well thought out. The inmates appeared to understand the prime importance of sufficient start-up financing and the difficulties they would encounter in obtaining such financing. The general impression of these experts was that these inmates were "street smart" and that this might be an indication of entrepreneurial aptitude or propensity. Thus, these inmates might have as much potential to succeed in a small business start-up as any attendees at previous self-employment workshops conducted by these professionals. Furthermore, word of these prison sessions has spread through the inmate grapevine to other prisons, resulting in an increase in requests from prisons for such self-employment workshops (*Small Business Score*, 1992; *Ibid.*, 1993).

Current statistics on crime and prison clearly indicate that a crisis exists. Almost two percent of the adult population of the United States is in prison, on parole, or on probation (Ticer, 1989). The 1992 prison inmate population was 883,593 (*Newsday*, 1993). A major contribution

factor is recidivism, the return of an ex-convict to crime. Justice Department data indicate that 70 percent of young convicts who are paroled find their way back into prison within six years (Seligman, 1989). Since most studies of recidivism rely on convictions rather than crimes committed, this figure is probably low (Grossman, 1985). Looking at this situation from another angle, 6 percent of criminals commit 70 percent of all violent crimes (Kramer, 1994). All of this data support society's concern about what a released prisoner does upon returning to free life. Any programs that successfully direct a released prisoner toward a productive life should be cost effective in light of the alternatives chosen by most of his or her peers.

Thus, it is certainly in society's best interests for ex-convicts to find employment. However, it is extremely difficult for ex-convicts to find meaningful employment after leaving prison. Most businesses are very hesitant to employ such individuals (even when the economy is strong and general unemployment is low). Yet, unemployed ex-convicts are three to five times more likely to commit another crime than are those who do find employment (Jackson, 1990). Thus, *self-employment* as opposed to *employment by others* offers a possible alternative for ex-convicts and a possible means to reduce recidivism. If it can be shown that some or all prison inmates do indeed have an aptitude for entrepreneurship, then arguments can be made for the funding and implementation of self-employment training programs in prisons for inmates who are soon to be released.

Although the subjective impressions of small business specialists who have worked with prison inmates is revealing, more objective measurement of inmates' entrepreneurial aptitude is required. This article reports on a formal testing of entrepreneurial propensity among a sample of prison inmates. It provides a statistical comparison of these inmates' scores with the scores of several groups of practicing entrepreneurs and a more limited comparison with the scores of a sample of laid-off workers. Various computer database searches of the literature indicate that such an empirical testing of prison inmates has not been previously performed, nor has there been any significant non-empirical discussion of self-employment as an option for ex-convicts.

METHODOLOGY

The Miner Sentence Completion Scale-Form T (MSCS-T) is an instrument that measures five aspects of task motivation: a need for self-achievement, a preference for avoiding unnecessary risks, a desire for feedback on the results of one's efforts, an aspiration for personal innovation, and a want to think and plan for the future. Prior research studies have indicated a correlation between such task motivation and positive entrepreneurial performance (Bellu, 1988; Bellu, 1990; Bellu, 1992; Smith, 1985; Smith, 1987). Thus, the MSCS-T can be considered a valid test for entrepreneurial aptitude or propensity.

The testing instrument requires the respondent to complete 40 stems, 8 of which measure each of these attitude traits. Five subscale scores and a total entrepreneurial task motivation score can be calculated from each completed instrument. Subscale scores can vary from +8 to -8 and total scores can range from +40 to -40, although actual scores tend to be much more narrowly distributed.

Miner (1986) provides normative test score data for 135 entrepreneurs spread throughout the United States. In addition, test score data for two groups of entrepreneurs, one from fast-growth firms and another from slow-growth firms, have been reported by Smith (1985). Thus, good test score data exists for a comparison with test scores of prison inmates.

Since one objective of this current research study is to determine the potential value of possible self-employment training programs for inmates and/or ex-convicts, it is also worthwhile to compare inmate scores with scores of a group that is currently the target of such training programs—laid-off (or “displaced”) workers. MSCS-T score data for a sample of displaced workers has been reported by Sonfield (1990) and can also be compared to inmate data.

There are significant obstacles to testing prison inmates for entrepreneurial propensity using the MSCS-T. First, most prisons are very reluctant to allow researchers entry and access to inmates. Any input or intrusion from outside is considered a potential risk to internal stability and control. Several attempts with both state and federal prisons were made by the authors before one acceptance was obtained at a prison in downstate New York.

A second obstacle to successful testing is the reluctance of prison inmates to cooperate, as such cooperation must come solely on a voluntary basis. In this study, about half of the inmates asked to volunteer did so (certainly a better response rate than most mail surveys). The inmates asked were a convenience sample of the total prison population. The request for volunteers was presented to the inmates in a neutral manner to minimize the possibility that the resulting sample would be self-selective in any way.

Still, a third obstacle in this specific situation is the nature of the research instrument itself. The MSCS-T requires the respondent to develop a complete sentence from 40 short sentence beginnings or “stems” (such as “Inventing something new ...” or “Working with a partner ...”). A large portion of prison inmates have limited writing skills and have difficulty in completing the sentences sufficiently for valid scoring to be done. About 25 percent of the respondents’ test forms were therefore not usable, either because the responses were too minimal or because too many items were left blank.

Twenty-nine MSCS-T instruments were completed in a manner that allowed full and valid testing. This was a sufficient sample size for the statistical analysis methods used. To increase validity in scoring, two independent scorings were performed by separate scorers. The means of the two scores for each of the 40 items were used for analytical purposes. The inmates tested were all convicted felons (i.e., convicted of more serious crimes). The respondents were evenly divided between first-time and repeat offenders. A variety of crimes were involved.

RESULTS

Mean MSCS-T total scores and subscale scores for the prison inmate sample, along with scores for the normative entrepreneurial sample, the fast-growth entrepreneurs, the slow-growth entrepreneurs, and the displaced workers are presented in Table 1. A statistical comparison of these means is presented in Table 2.

Table 1

Mean MSCS-F T Scores

	I Prison Inmates (n=29)	II Normative Data for Entrepreneurs (n=135)	III Entrepreneurs Fast-Growth Firms (n=50)	IV Entrepreneurs Slow-Growth Firms (n=47)	V Dislocated Workers (n=36)
TOTAL SCORE	8.59	6.81	11.32	0.32	0.69
Self-Achievement	2.35	1.91	3.32	0.34	-0.31
Avoiding Risks	1.85	0.94	1.44	-0.28	-0.14
Feedback of Results	1.55	-0.20	0.50	-1.68	-0.06
Personal Innovation	2.94	2.99	4.06	1.64	1.42
Planning for the Future	-0.07	1.17	2.10	0.30	-0.17

Sources: Prison Inmates: Current Study
 Normative Data: Miner (1986)
 Entrepreneurs, Fast Growth and Slow Growth: Smith (1985)
 Displaced workers: Sonfield (1990)

Table 2

Significance Levels

	I vs. II Inmates vs. Normative Entrepreneurs		I vs. III Inmates vs. Fast-Growth Entrepreneurs		I vs. IV Inmates vs. Slow-Growth Entrepreneurs	
	<i>t</i>	<i>p</i>	<i>t</i>	<i>p</i>	<i>t</i>	<i>p</i>
TOTAL SCORE	1.487	NS	2.001	<.025	6.126	<.005
Self-Achievement	1.103	NS	2.095	<.025	4.194	<.005
Avoiding Risks	1.933	<.05	0.755	NS	3.793	<.005
Feedback of Results	4.556	<.005	2.381	<.01	7.281	<.005
Personal Innovation	0.126	NS	2.536	<.01	2.662	<.005
Planning for the Future	2.772	<.005	3.938	<.005	0.651	NS

Note: Statistical hypothesis test techniques for two normally distributed populations using independent samples with unequal standard deviations; one-tailed test critical values.

Looking at the Total Score data, it appears that the subjective conclusions of the small business experts are supported by this more objective empirical testing effort. The MSCS-T Total Score mean for the inmate sample is much higher than the mean score of the entrepreneurs from slow-growth firms. The mean score of the dislocated workers is somewhat higher than the large sample normative entrepreneurial mean score and somewhat lower than the score of entrepreneurs from fast-growth firms.

Thus, the data support the conclusion that these prison inmates have a high entrepreneurial aptitude. In fact, when these prison inmates are compared to the entrepreneurs in Miner's normative sample of 135 entrepreneurs, there is no significant difference in total entrepreneurial score. Furthermore, these prison inmates, though lower in total entrepreneurial motivation than entrepreneurs of fast-growing firms, scored considerably higher than the entrepreneurs of slow-growing firms.

Because standard deviations or other data on the distribution of the dislocated workers' scores were not available, a statistical comparison using these means was not possible. However, it should be noted that the dislocated workers' raw scores were similar to those of the slow-growth entrepreneurs, who scored statistically well below the inmates.

The subscale data provides much additional information. The inmates scored significantly higher than the slow-growth entrepreneurs and the dislocated workers with regard to most of the entrepreneurial factors. They scored either higher or similarly to all but one of the normative scores. The fast-growth entrepreneurs scored either higher or similarly to the inmates on most of the subscale factors, but these results are more mixed.

Several individual subscale comparisons are especially interesting. In comparison to the other groups, the prison inmates are especially low in their inclination to plan for the future. This is not surprising, given the nature of their current incarcerated situation. Perhaps, if we had tested only inmates close to release, we would have obtained a significantly higher score for this subscale (and thus a higher total score as well).

The inmates also stand out from all of the other groups in their high need for feedback of results. This is the one subscale where the inmates scored higher than *all* other groups, including the fast-growth entrepreneurs. This inmate characteristic may also be the result of their incarcerated status. This may result from their for peer acceptance and/or the requirement for the permission of the guards for many of their everyday actions and decisions.

CONCLUSIONS

Empirical analysis of the entrepreneurial aptitude of this sample of prison inmates, measured by Miner Sentence Completion Scale-Form T testing of task motivation, indicates that these inmates have an entrepreneurial aptitude, comparable to or higher than samples of currently practicing entrepreneurs. Since a major cause of inmate recidivism is the inability of ex-convicts to obtain employment, and if indeed some or all prison inmates have significant entrepreneurial propensity, then self-employment may be a valid alternative path to employment for ex-convicts.

The data generated in this study may support further consideration of programs to assist soon-to-be-released and/or recently released prison inmates in implementing self-employment and entrepreneurial activities. Such programs would be similar to current federally- and state-funded

programs aimed at laid-off workers. However, since these laid-off workers have tended to score poorly in entrepreneurial aptitude in earlier studies, it is possible that self-employment programs for certain prison inmates would be more effective than such programs for displaced workers.

The design of such programs would be critical to their potential for effectiveness and success. Especially crucial would be inmate selection for such programs, which might involve such factors as the proximity to the end of the inmate's term of incarceration, his or her entrepreneurial aptitude score, pre-prison work experience, conduct in confinement, writing skills, etc. Prior research indicates that some measure of inmate commitment to the program would also help predict the potential benefits of the program to the inmate (Morris, 1987). Program scheduling and content would also require much consideration. Also, the serious problems that an ex-convict would face in obtaining financing, credit, contracts, etc. would have to be addressed. While a lengthy discussion of these issues is beyond the scope of this article, a full analysis of program design issues is presented by Sonfield (1992).

Clearly, this initial research effort was limited in scope. Further research is necessary before strong conclusions can be reached. While this study does not enable us to categorically conclude that some or all prison inmates have high entrepreneurial propensity, and that therefore self-employment programs for prison inmates will definitely reduce the rate of recidivism, this research does provide us with some preliminary conclusions concerning the inmates tested. It also substantiates the value of further research. Ideally, such further research would involve larger sample sizes, randomly selected at several prison sites. A larger sample of prison inmates might allow us to differentiate between the MSCS-T scores of various groups of inmates (perhaps first-time versus repeat offenders, by type of criminal conviction, by type of pre-prison employment, or by proximity to prison release date), and thus further identify those inmates with the best potential for self-employment success and most likely to benefit from entrepreneurial training.

Yet, as discussed previously, much effort will be required to obtain more "ideal" samples. In the meantime, this study and its results provide a preliminary indication of prison inmate entrepreneurial aptitude, the potential value of self-employment training for certain inmates, and the need for further and expanded research.

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