

## *Interpersonal Dynamics in a Simulated Prison*

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Interpersonal dynamics in a prison environment were studied experimentally by designing a functional simulation of a prison in which subjects role-played prisoners and guards for an extended period of time. To assess the power of the social forces on the emergent behaviour in this situation, alternative explanations in terms of pre-existing dispositions were eliminated through subject selection. A homogeneous, "normal" sample was chosen after extensive interviewing and diagnostic testing of a large group of volunteer male college students. Half of the subjects were randomly assigned to role-play prison guards for eight hours each day, while the others role-played prisoners incarcerated for nearly one full week. Neither group received any specific training in these roles.

Continuous, direct observation of behavioural interactions was supplemented by video-taped recording, questionnaires, self-report scales and interviews. All these data sources converge on the conclusion that this simulated prison developed into a psychologically compelling prison environment. As such, it elicited unexpectedly intense, realistic and often pathological reactions from many of the participants. The prisoners experienced a loss of personal identity and the arbitrary control of their behaviour which resulted in a syndrome of passivity, dependency, depression and helplessness. In contrast, the guards (with rare exceptions) experienced a marked gain in social power, status and group identification which made role-playing rewarding.

The most dramatic of the coping behaviour utilised by half of the prisoners in adapting to this stressful situation was the development of acute emotional disturbance—severe enough to warrant their early release. At least a third of the guards were judged to have become far more aggressive and dehumanising toward the prisoners than would ordinarily be predicted in a simulation study. Only a very few of the observed reactions to this experience of imprisonment could be attributed to personality trait differences which existed before the subjects began to play their assigned roles.

### Introduction

After he had spent four years in a Siberian prison the great Russian novelist Dostoevsky commented, surprisingly, that his time in prison had created in him a deep optimism about the ultimate future of mankind because, as he put it, if man could survive the horrors of prison life he must surely be a "creature who could withstand anything". The cruel irony which Dostoevsky overlooked is that the reality of prison bears witness not only to the resilience and adaptiveness of the men who tolerate life within its walls, but as well to the "ingenuity" and tenacity of those who devised and still maintain our correctional and reformatory systems.

Nevertheless, in the century which has passed since Dostoevsky's imprisonment, little has changed to render the main thrust of his statement less relevant. Although we have passed through periods of enlightened humanitarian reform, in which physical conditions within prisons have improved somewhat and the rhetoric of rehabilitation has replaced the language of punitive incarceration, the social institution of prison has continued to fail. On purely pragmatic grounds, there is substantial evidence that prisons in fact neither "rehabilitate" nor act as a deterrent to future crime—in America, recidivism rates upwards of 75% speak quite decisively to these criteria. And, to perpetuate what is additionally an economic failure, American taxpayers alone must provide an expenditure for "corrections" of 1.5 billion dollars annually. On humanitarian grounds as well, prisons have failed: our mass media are increasingly filled with accounts of atrocities committed daily, man against man, in reaction to the penal system or in the name of it. The experience of prison undeniably creates, almost to the point of cliché, an intense hatred and disrespect in most inmates for the authority and the established order of society into which they will eventually return. And the toll which it takes on the deterioration of human spirit for those who must administer it, as well as for those upon whom it is inflicted, is incalculable.

Attempts to provide an explanation of the deplorable condition of our penal system and its dehumanising effects upon prisoners and guards, often focus upon what might be called the *dispositional hypothesis*. While this explanation is rarely expressed explicitly, it is central to a prevalent non-conscious ideology: that the state of the social institution of prison is due to the "nature" of the people who administer it, or the "nature" of the people who populate it, or both. That is, a major contributing cause to despicable conditions, violence, brutality, dehumanisation and degradation existing within any prison can be traced to some innate or acquired characteristic of the correctional and inmate population. Thus on the one hand, there is the contention that violence and brutality exist within prison because guards are sadistic, uneducated, and insensitive people. It is the "guard mentality", a unique syndrome of negative traits which they bring into the situation, that engenders the inhumane treatment of prisoners. Or, from other quarters comes the argument that violence and brutality in prison are the logical and predictable result of the

involuntary confinement of a collective of individuals whose life histories are, by definition, characterised by disregard for law, order and social convention and a concurrent propensity for impulsiveness and aggression. Logically, it follows that these individuals, having proved themselves incapable of functioning satisfactorily within the "normal" structure of society, cannot do so either inside the structure provided by prisons. To control such men as these, the argument continues, whose basic orientation to any conflict situation is to react with physical power or deception, force must be met with force, and a certain number of violent encounters must be expected and tolerated by the public.

The dispositional hypothesis has been embraced by the proponents of the prison *status quo* (blaming conditions on the evil in the prisoners), as well as by its critics (attributing the evil to guards and staff with their evil motives and deficient personality structures). The appealing simplicity of this proposition localises the source of prison riots, recidivism and corruption in these "bad seeds" and not in the conditions of the "prison soil". Such an analysis directs attention away from the complex matrix of social, economic and political forces which combine to make prisons what they are—and which would require complex, expensive, revolutionary solutions to bring about any meaningful change. Instead, rioting prisoners are identified, punished, transferred to maximum security institutions or shot, outside agitators sought and corrupt officials suspended—while the system itself goes on essentially unchanged, its basic structure unexamined and unchallenged.

However, a critical evaluation of the dispositional hypothesis cannot be made directly through observation in existing prison settings, since such naturalistic observation necessarily confounds the acute effects of the environment with the chronic characteristics of the inmate and guard populations. To separate the effects of the prison environment *per se* from those attributable to *a priori* dispositions of its inhabitants requires a research strategy in which a "new" prison is constructed, comparable in its fundamental social-psychological milieu to existing prison systems, but entirely populated by individuals who are undifferentiated in all essential dimensions from the rest of society.

Such was the approach taken in the present empirical study, namely, to create a prison-like situation in which the guards and inmates were initially comparable and characterised as being "normal-average", and then to observe the patterns of behaviour which resulted, as well as the cognitive, emotional and attitudinal reactions which emerged. Thus, we began our experiment with a sample of individuals who did not deviate from the normal range of the general population on a variety of dimensions we were able to measure. Half were randomly assigned to the role of "prisoner", the others to that of "guard", neither group having any history of crime, emotional disability, physical handicap nor even intellectual or social disadvantage.

The environment created was that of a "mock" prison which physically constrained the prisoners in barred cells and psychologically conveyed the sense of imprisonment to all participants. Our intention was not to create a *literal*

simulation of an American prison, but rather a functional representation of one. For ethical, moral and pragmatic reasons we could not detain our subjects for extended or indefinite periods of time, we could not exercise the threat and promise of severe physical punishment, we could not allow homosexual or racist practices to flourish, nor could we duplicate certain other specific aspects of prison life. Nevertheless, we believed that we could create a situation with sufficient mundane realism to allow the role-playing participants to go beyond the superficial demands of their assignment into the deep structure of the characters they represented. To do so, we established functional equivalents for the activities and experiences of actual prison life which were expected to produce qualitatively similar psychological reactions in our subjects—feelings of power and powerlessness, of control and oppression, of satisfaction and frustration, of arbitrary rule and resistance to authority, of status and anonymity, of machismo and emasculation. In the conventional terminology of experimental social psychology, we first identified a number of relevant conceptual variables through analysis of existing prison situations, then designed a setting in which these variables were made operational. No specific hypotheses were advanced other than the general one that assignment to the treatment of “guard” or “prisoner” would result in significantly different reactions on behavioural measures of interaction, emotional measures of mood state and pathology, attitudes toward self, as well as other indices of coping and adaptation to this novel situation. What follows is the mechanics of how we created and peopled our prison, what we observed, what our subjects reported, and finally, what we can conclude about the nature of the prison environment and the experience of imprisonment which can account for the failure of our prisons.

## **Method**

### *Overview*

The effects of playing the role of “guard” or “prisoner” were studied in the context of an experimental simulation of a prison environment. The research design was a relatively simple one, involving as it did only a single treatment variable, the random assignment to either a “guard” or “prisoner” condition. These roles were enacted over an extended period of time (nearly one week) within an environment which was physically constructed to resemble a prison. Central to the methodology of creating and maintaining a psychological state of imprisonment was the functional simulation of significant properties of “real prison life” (established through information from former inmates, correctional personnel and texts).

The “guards” were free with certain limits to implement the procedures of induction into the prison setting and maintenance of custodial retention of the “prisoners”. These inmates, having voluntarily submitted to the conditions of this total institution in which they now lived, coped in various ways with its

stresses and its challenges. The behaviour of both groups of subjects was observed, recorded and analysed. The dependent measures were of two general types: transactions between and within each group of subjects, recorded on video and audio tape as well as directly observed; individual reactions on questionnaires, mood inventories, personality tests, daily guard shift reports, and post experimental interviews.

### *Subjects*

The 21 subjects who participated in the experiment were selected from an initial pool of 75 respondents, who answered a newspaper advertisement asking for male volunteers to participate in a psychological study of "prison life" in return for payment of \$15 per day. Those who responded to the notice completed an extensive questionnaire concerning their family background, physical and mental health history, prior experience and attitudinal propensities with respect to sources of psychopathology (including their involvement in crime). Each respondent who completed the background questionnaire was interviewed by one of two experimenters. Finally, the 24 subjects who were judged to be most stable (physically and mentally), most mature, and least involved in anti-social behaviour were selected to participate in the study. On a random basis, half of the subjects were assigned the role of "guard", half to the role of "prisoner".

The subjects were normal, healthy males attending colleges throughout the United States who were in the Stanford area during the summer. They were largely of middle class socio-economic status, Caucasians (with the exception of one Oriental subject). Initially they were strangers to each other, a selection precaution taken to avoid the disruption of any pre-existing friendship patterns and to mitigate against any transfer into the experimental situation of previously established relationships or patterns of behaviour.

This final sample of subjects was administered a battery of psychological tests on the day prior to the start of the simulation, but to avoid any selective bias on the part of the experimenter-observers, scores were not tabulated until the study was completed.

Two subjects who were assigned to be a "stand-by" in case an additional "prisoner" was needed were not called, and one subject assigned to be a "stand-by" guard decided against participating just before the simulation phase began—thus, our data analysis is based upon ten prisoners and eleven guards in our experimental conditions.

### *Procedure*

#### Physical aspects of the prison

The prison was built in a 35-ft section of a basement corridor in the psychology building at Stanford University. It was partitioned by two fabricated walls, one of which was fitted with the only entrance door to the cell block, the other

contained a small observation screen. Three small cells (6 x 9 ft) were made from converted laboratory rooms by replacing the usual doors with steel barred, black painted ones, and removing all furniture.

A cot (with mattress, sheet and pillow) for each prisoner was the only furniture in the cells. A small closet across from the cells served as a solitary confinement facility; its dimensions were extremely small (2 x 2 x 7 ft) and it was unlit.

In addition, several rooms in an adjacent wing of the building were used as guards' quarters (to change in and out of uniform or for rest and relaxation), a bedroom for the "warden" and "superintendent", and an interview-testing room. Behind the observation screen at one end of the "yard" was video recording equipment and sufficient space for several observers.

#### Operational details

The "prisoner" subjects remained in the mock-prison 24 hours per day for the duration of the study. Three were arbitrarily assigned to each of the three cells; the others were on stand-by call at their homes. The "guard" subjects worked on three-man, eight-hour shifts; remaining in the prison environment only during their work shift, going about their usual lives at other times.

#### Role instruction

All subjects had been told that they would be assigned either the guard or the prisoner role on a completely random basis and all had voluntarily agreed to play either role for \$15.00 per day for up to two weeks. They signed a contract guaranteeing a minimally adequate diet, clothing, housing and medical care as well as the financial remuneration in return for their stated "intention" of serving in the assigned role for the duration of the study.

It was made explicit in the contract that those assigned to be prisoners should expect to be under surveillance (have little or no privacy) and to have some of their basic civil rights suspended during their imprisonment, excluding physical abuse. They were given no other information about what to expect nor instructions about behaviour appropriate for a prisoner role. Those actually assigned to this treatment were informed by phone to be available at their place of residence on a given Sunday when we would start the experiment.

The subjects assigned to be guards attended an orientation meeting on the day prior to the induction of the prisoners. At this time they were introduced to the principal investigators, the "Superintendent" of the prison (P.G.Z.) and an undergraduate research assistant who assumed the administrative role of "Warden". They were told that we wanted to try to simulate a prison environment within the limits imposed by pragmatic and ethical considerations. Their assigned task was to "maintain the reasonable degree of order within the prison necessary for its effective functioning", although the specifics of how this

duty might be implemented were not explicitly detailed. They were made aware of the fact that while many of the contingencies with which they might be confronted were essentially unpredictable (e.g. prisoner escape attempts), part of their task was to be prepared for such eventualities and to be able to deal appropriately with the variety of situations that might arise. The "Warden" instructed the guards in the administrative details, including: the work-shifts, the mandatory daily completion of shift reports concerning the activity of guards and prisoners, the completion of "critical incident" reports which detailed unusual occurrences and the administration of meals, work and recreation programmes for the prisoners. In order to begin to involve these subjects in their roles even before the first prisoner was incarcerated, the guards assisted in the final phases of completing the prison complex—putting the cots in the cells, signs on the walls, setting up the guards' quarters, moving furniture, water coolers, refrigerators, etc.

The guards generally believed that we were primarily interested in studying the behaviour of the prisoners. Of course, we were equally interested in the effect which enacting the role of guard in this environment would have on their behaviour and subjective states.

To optimise the extent to which their behaviour would reflect their genuine reactions to the experimental prison situation and not simply their ability to follow instructions, they were intentionally given only minimal guidelines for what it meant to be a guard. An explicit and categorical prohibition against the use of physical punishment or physical aggression was, however, emphasised by the experimenters. Thus, with this single notable exception, their roles were relatively unstructured initially, requiring each "guard" to carry out activities necessary for interacting with a group of "prisoners" as well as with other "guards" and the "correctional staff".

#### Uniform

In order to promote feelings of anonymity in the subjects each group was issued identical uniforms. For the guards, the uniform consisted of: plain khaki shirts and trousers, a whistle, a police night stick (wooden batons) and reflecting sunglasses which made eye contact impossible. The prisoners' uniform consisted of loosely fitting muslin smocks with an identification number on front and back. No underclothes were worn beneath these "dresses". A chain and lock were placed around one ankle. On their feet they wore rubber sandals and their hair was covered with a nylon stocking made into a cap. Each prisoner was also issued a toothbrush, soap, soapdish, towel and bed linen. No personal belongings were allowed in the cells.

The outfitting of both prisoners and guards in this manner served to enhance group identity and reduce individual uniqueness within the two groups. The khaki uniforms were intended to convey a military attitude, while the whistle and night-stick were carried as symbols of control and power. The prisoners'

uniforms were designed not only to deindividuate the prisoners but to be humiliating and serve as symbols of their dependence and subservience. The ankle chain was a constant reminder (even during their sleep when it hit the other ankle) of the oppressiveness of the environment. The stocking cap removed any distinctiveness associated with hair length, colour or style (as does shaving of heads in some "real" prisons and the military). The ill-fitting uniforms made the prisoners feel awkward in their movements; since these dresses were worn without undergarments, the uniforms forced them to assume unfamiliar postures, more like those of a woman than a man—another part of the emasculating process of becoming a prisoner.

#### Induction procedure

With the cooperation of Palo Alto City Police Department all of the subjects assigned to the prisoner treatment were unexpectedly "arrested" at their residences. A police officer charged them with suspicion of burglary or armed robbery, advised them of their legal rights, handcuffed them, thoroughly searched them (often as curious neighbours looked on) and carried them off to the police station in the rear of the police car. At the station they went through the standard routines of being fingerprinted, having an identification file prepared and then being placed in a detention cell. Each prisoner was blindfolded and subsequently driven by one of the experimenters and a subject-guard to our mock prison. Throughout the entire arrest procedure, the police officers involved maintained a formal, serious attitude, avoiding answering any questions of clarification as to the relation of this "arrest" to the mock prison study.

Upon arrival at our experimental prison, each prisoner was stripped, sprayed with a delousing preparation (a deodorant spray) and made to stand alone naked for a while in the cell yard. After being given the uniform described previously and having an I.D. picture taken ("mug shot"), the prisoner was put in his cell and ordered to remain silent.

#### Administrative routine

When all the cells were occupied, the warden greeted the prisoners and read them the rules of the institution (developed by the guards and the warden). They were to be memorised and to be followed. Prisoners were to be referred to only by the number on their uniforms, also in an effort to depersonalise them.

The prisoners were to be served three bland meals per day, were allowed three supervised toilet visits, and given two hours daily for the privilege of reading or letterwriting. Work assignments were issued for which the prisoners were to receive an hourly wage to constitute their \$15 daily payment. Two visiting periods per week were scheduled, as were movie rights and exercise periods. Three times a day all prisoners were lined up for a "count" (one on each guard

work-shift). The initial purpose of the "count" was to ascertain that all prisoners were present, and to test them on their knowledge of the rules and their I.D. numbers. The first perfunctory counts lasted only about 10 minutes, but on each successive day (or night) they were spontaneously increased in duration until some lasted several hours. Many of the pre-established features of administrative routine were modified or abandoned by the guards, and some were forgotten by the staff over the course of the study.

*Data collection (dependent measures)*

The exploratory nature of this investigation and the absence of specific hypotheses led us to adopt the strategy of surveying as many as possible behavioural and psychological manifestations of the prison experience on the guards and the prisoners. In fact, one major methodological problem in a study of this kind is defining the limits of the "data", since relevant data emerged from virtually every interaction between any of the participants, as well as from subjective and behavioural reactions of individual prisoners, guards, the warden, superintendent, research assistants and visitors to the prison. It will also be clear when the results are presented that causal direction cannot always be established in the patterns of interaction where any given behaviour might be the consequence of a current or prior instigation by another subject and, in turn, might serve as impetus for eliciting reactions from others.

Data collection was organised around the following sources:

(1) *Videotaping*. About 12 hours of recordings were made of daily, regularly occurring events, such as the counts and meals, as well as unusual interactions, such as a prisoner rebellion, visits from a priest, a lawyer and parents, Parole Board meetings and others. Concealed video equipment recorded these events through a screen in the partition at one end of the cell-block yard or in a conference room (for parole meetings).

(2) *Audio recording*. Over 30 hours of recordings were made of verbal interactions between guards and prisoners on the prison yard. Concealed microphones picked up all conversation taking place in the yard as well as some within the cells. Other concealed recordings were made in the testing-interview room on selected occasions—interactions between the warden, superintendent and the prisoners' Grievance Committee, parents, other visitors and prisoners released early. In addition, each subject was interviewed by one of the experimenters (or by other research associates) during the study, and most just prior to its termination.

(3) *Rating scales*. Mood adjective checklists and sociometric measures were administered on several occasions to assess emotional changes in affective state and interpersonal dynamics among the guard and prisoner groups.

(4) *Individual difference scales*. One day prior to the start of the simulation all subjects completed a series of paper and pencil personality tests. These tests

were selected to provide dispositional indicators of interpersonal behaviour styles—the *F* scale of Authoritarian Personality [1], and the Machiavellianism Scale [2]—as well as areas of possible personality pathology through the newly developed Comrey Personality Scale [3]. The subscales of this latter test consist of:

- (a) trustworthiness
- (b) orderliness
- (c) conformity
- (d) activity
- (e) stability
- (f) extroversion
- (g) masculinity
- (h) empathy

(5) *Personal observations.* The guards made daily reports of their observations after each shift, the experimenters kept informal diaries and all subjects completed post-experimental questionnaires of their reactions to the experience about a month after the study was over.

Data analyses presented problems of several kinds. First, some of the data was subject to possible errors due to selective sampling. The video and audio recordings tended to be focussed upon the more interesting, dramatic events which occurred. Over time, the experimenters became more personally involved in the transaction and were not as distant and objective as they should have been. Second, there are not complete data on all subjects for each measure because of prisoners being released at different times and because of unexpected disruptions, conflicts and administrative problems. Finally, we have a relatively small sample on which to make cross-tabulations by possible independent and individual difference variables.

However, despite these shortcomings some of the overall effects in the data are powerful enough to reveal clear, reliable results. Also some of the more subtle analyses were able to yield statistically significant results even with the small sample size. Most crucial for the conclusions generated by this exploratory study is the consistency in the pattern of relationships which emerge across a wide range of measuring instruments and different observers. Special analyses were required only of the video and audio material, the other data sources were analysed following established scoring procedures.

#### *Video analysis*

There were 25 relatively discrete incidents identifiable on the tapes of prisoner-guard interactions. Each incident or scene was scored for the presence of nine behavioural (and verbal) categories. Two judges who had not been involved with the simulation study scored these tapes. These categories were defined as follows:

