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Personality and Individual Differences 41 (2006) 49–59

PERSONALITY AND
INDIVIDUAL DIFFERENCES

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Custodial interrogation, false confession and individual differences: A national study among Icelandic youth

Gisli H. Gudjonsson ^{a,*}, Jon Fridrik Sigurdsson ^b,
Bryndis Bjork Asgeirsdottir ^c, Inga Dora Sigfusdottir ^c

^a *Department of Psychology, Institute of Psychiatry, De Crespigny Park, Denmark Hill,
London SE5 8AF, United Kingdom*

^b *Division of Psychiatry, University Hospital, IS-101 Reykjavik, Iceland*

^c *School of Health and Education, Reykjavik University, IS-103 Reykjavik, Iceland*

Received 23 August 2005; received in revised form 1 November 2005; accepted 21 December 2005
Available online 10 March 2006

Abstract

The main aims of the study were twofold. Firstly, to ascertain a national base rate of custodial interrogation, confession, denial and false confession among Icelandic youth (age group 16–24 years), and secondly, to investigate psychological and criminological factors associated with false confession. The participants were 10,472 students in further education in Iceland. All colleges of secondary education in Iceland were represented. As a part of a large national study into the background, behaviour, and mental health of adolescents, each pupil was asked about custodial interrogation, confessions, denials, and false confessions. Almost one-fourth (18.6%) of the participants stated, that they had been interrogated by the police in relation to a suspected offence, of whom 53% said they had confessed truthfully. A small minority of those interrogated (7.3% of those interrogated and 1.6% of the total sample) claimed to have made false confessions to the police. The false confession rate was highest (12%) among those interrogated more than once and lowest (3%) among those interrogated only once. A Discriminant Function Analysis found that false confessions during interrogation were mostly associated with the extent of involvement in delinquent activities, the involvement of friends in delinquency, and depression.

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* Corresponding author. Tel.: +0207 848 0768; fax: +0207 848 0860.
E-mail address: g.gudjonsson@iop.kcl.ac.uk (G.H. Gudjonsson).

Keywords: Interrogation; Confessions; Denials; Base rates; False confessions; Delinquency; Mental state

1. Introduction

It is only in the last two decades that scientists have taken serious interest in false confessions made during custodial interrogation (The Lancet, 1994). Numerous high profile cases of false confessions have been reported (Gudjonsson, 2003; Kassin & Gudjonsson, 2004), but these are likely to represent “only the tip of a much larger iceberg” (Drizin & Leo, 2004, p. 919). Kassin and Gudjonsson (2004) comment: “As no one knows the frequency of false confessions or has devised an adequate method of calculating precise incident rates, there is perennial debate over the numbers” (p. 48).

The only large-scale prison and community studies into false confession rates have been carried out in Iceland. Gudjonsson and Sigurdsson (1994) and Sigurdsson and Gudjonsson (1996) asked Icelandic prison inmates if they had ever confessed falsely to the police. In both studies, 12% claimed to have made a false confession to the police at some time in their lives. In two community studies among Icelandic college and university students, who reported that they had been interrogated by the police, 3.7% and 1.2%, respectively, claimed to have made a false confession (Gudjonsson, Sigurdsson, Bragason, Einarsson, & Valdimarsdottir, 2004a; Gudjonsson, Sigurdsson, & Einarsson, 2004b).

The present study builds on the methodology of previous Icelandic prison and community studies, but has three main additional aims. Firstly, to ascertain a national base rate of custodial interrogation, confession, denial and false confession among Icelandic youth. Secondly, to separate the sample into those who had been interrogated only once from those interrogated on several occasions, because in the previous research no such distinction was made. It was hypothesised that those with frequent interrogation experience would be particularly likely to report false confessions (Sigurdsson & Gudjonsson, 2001). Thirdly, to investigate the association of making a false confession with variables relating to mental state and well-being (anxiety, depression, anger, self-esteem, attitude towards school, and parental support), the involvement in delinquent behaviours, and the extent of delinquent behaviour of friends. In view of the research of Sigurdsson and Gudjonsson (2001) among prison inmates and Sigurdsson, Gudjonsson, Einarsson, and Gudmundsson (in press) among police station detainees, it was hypothesised that the reporting of false confession during interrogation would be associated with disturbed mental state, poor self-esteem, negative attitude towards school and active involvement in delinquency of participants and their friends. We also explored the effect of age and gender, but did not test any specific hypotheses.

2. Method

2.1. Participants

The participants were 10,472 students in further education in Iceland, which represented over 80% of all students in further education in Iceland on 23rd October 2004 when the study was

conducted. In Iceland compulsory education ends at the age of 15 and further education commences at age 16. The students were from all 38 secondary education colleges in Iceland. There were 5129 (49%) males and 5305 (51%) females in the study (38 participants did not specify their gender on the questionnaire). The average age for the sample (18 did not specify their age) was 17.7 years (range = 16–24, SD = 1.8). The sample was highly representative of young persons in Iceland, because in 2004, 93% of all 16-year olds attended further education (Statistics Iceland, 2005). In Iceland criminal responsibility starts at the age of 15 and the age of majority (adulthood) is 18.

2.2. Instruments

The data used in the study are a population-based survey among high school students in Iceland in 2004. The survey was conducted by The Icelandic Center for Social Research and Analysis in cooperation with The Government Agency for Child Protection, Ministry of Education and The Public Health Institute of Iceland. The questionnaire consisted of 169 items relating to the students' educational, family and social background, sexual experiences and abuse, and history of substance abuse, anxiety, depression, anger problems, self-esteem, offending, and offending by friends. Section 103 specifically asked the participants about their experiences of police interrogation, confessions, denials, false confessions and convictions. The four relevant questions were rated on a five-point frequency scale ('Never', 'Once', 'Twice', '3–5 times', '6 or more times'). The question asked was 'How often (if at all) have you experienced the following during your life?' (only tick one column in each row):

1. Been interrogated by police at a police station about a suspected offence.
2. Confessed during interrogation to an offence that you did commit.
3. Confessed during interrogation to an offence that you did not commit.
4. Denied during interrogation an offence that you had committed.

In this article the following psychological and criminological variables were included in order to investigate how they discriminated between the participants who had reported a false confession during interrogation and those who did not. These were as follows:

Anxiety and depression (Derogatis, Lipman, Covi, & Rickels, 1972). There were three anxiety and 10 depression items used from the original Symptom Distress Checklist and these were rated on a four-point frequency scale ('Never', 'Seldom', 'Sometimes' and 'Often') to indicate severity of symptoms (Sigfusdottir, Farkas, & Silver, 2004).

Anger (Sigfusdottir et al., 2004). This is a five-item measure designed to assess the severity of anger problems. The items were from the SCL-90 by Derogatis, Lipman, and Covi (1973). Each item was rated on a four-point frequency scale as for anxiety and depression.

The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). This 10-item scale consists of positive and negative self-appraisal statements rated on a four point scale ranging from "strongly agree" to "strongly disagree". Scores range from 10 to 40 with higher scores reflecting low self-esteem.

Parental support (Sigfusdottir et al., 2004). This is a five-item measure designed to assess the extent of parental support about warmth and caring, discussions about personal affairs and providing advice. Scores for each item range from 1 ('Very difficult') to 4 ('Very easy').

Attitudes towards school. This is a 14-item unpublished measure designed to assess the participant's interest, well-being, effort, and success in school, as well as reported bullying. Scores for each item range from 1 ('Applies almost always to me') to 5 ('Applies almost never to me'). The higher the score the more positive the attitude towards school.

Involvement in delinquency (Sigfusdottir et al., 2004). This is a six-item measure designed to assess the extent of self-reported offending (e.g. theft, violence, vandalism, burglary, other) during the previous 12 months. Answers ranged from 1 = 'never', 2 = 'once', 3 = '2–5 times', 4 = '6–9 times', 5 = '10–13 times', 6 = '14–17 times', to 7 = '18 times or more often'.

Involvement of friends in delinquency. This is an 11-item unpublished measure designed to assess the extent of offending among the participant's friends. The question asked is: "How many of your friends do you think are involved in the following?" A range of behaviours is rated, including the smoking of cigarettes, the consumption of alcoholic beverages, watching pornography, illicit drug taking, theft, burglary, vandalism, and acts of violence. Each offending behaviour is rated on a five-point frequency scale from 1 ('None') to 4 ('All').

2.3. Procedure

The students were approached by teachers in class and asked to participate in a survey that was concerned with young people. The participants were told that their answers were anonymous and confidential. They were tested in scheduled classes. The questionnaire took about one hour to complete and upon completion students sealed them in blank envelopes. All participants throughout Iceland completed the study on the same day.

3. Results

The missing data on the relevant questions for the 10,472 participants, ranged between 0.4% for age to 2.8% for different variables.

3.1. Interrogated by police

Out of the total sample of 10,192 participants who answered the question about custodial interrogation, 1896 (18.6%) reported that they had been questioned at a police station as suspects. There was a significant difference between males and females ($\chi^2 = 506.14$, $df = 1$, $P < 0.001$), with 1359 (28%) of the males and 529 (10%) of the females stating that they had been interrogated one or more times (data for gender were missing in eight cases). The great majority of the total sample interrogated, or 1052 (55.5%), had been interrogated only once, 422 (22.3%) twice, 268 (14.1%) three to five times, and 154 (8.1%) six or more times.

3.2. Confessions and denials

Table 1 gives the confession rate separately for those who had been interrogated only once and those interrogated more than once. In order to estimate the confession rate in relation to each interrogation, the best figures to rely on are those relating to participants who had only been inter-

Table 1
Rates of confessions, denials and false confessions among participants who had been interrogated by the police

	Only interrogated once (<i>N</i> = 1052)			Interrogated more than once ^a (<i>N</i> = 844)			All interrogations ^a (<i>N</i> = 1896)		
	Total (%)	Male (%)	Female (%)	Total (%)	Male (%)	Female (%)	Total (%)	Male (%)	Female (%)
True confessions	484 (46%)	302 (46%)	182 (47%)	514 (62%)	438 (63%)	76 (57%)	998 (53%)	740 (55%)	258 (49%)
False confessions	35 (3%)	24 (4%)	11 (3%)	102 (12%)	85 (12%)	17 (13%)	137 (7%)	109 (8%)	28 (5%)
True denials	350 (33%)	191 (29%)	156 (40%)	–	–	–	–	–	–
False denials	183 (18%)	140 (21%)	43 (11%)	457 (55%)	398 (57%)	59 (43%)	640 (34%)	538 (40%)	102 (19%)

^a The numbers in these groups slightly exceed the number of participants, because where more than one interrogation had taken place more than one outcome (true confession, false confession, false denial) was endorsed. For this reason true denial were only calculated for those participants who reported being interrogated only once.

rogated once. The confession rate was 46% and 47% for males and females, respectively. The difference between males and females was not significant.

The confession rate is higher among those interrogated more than once, being 63% and 57% for males and females, respectively, with an average confession rate of 62%, because they had been interrogated on more occasions and were therefore likely to have at some time made a confession, as well as having a much higher rate of denial. The figures suggest that those participants who had been interrogated on several occasions were alternating between making true confessions, false denials, and false confessions.

3.3. *Base rate of guilt*

The base rate of guilt per interrogation was calculated for those participants who stated that the police had interrogated them only once. This was achieved by adding together the two categories, true confessions and false denials. True denials are not given in Table 1 for participants who reported being interrogated more than once, because it could only be reliably calculated for those interrogated once. When suspects had been interrogated more than once by the police, and many reported that they had been interrogated several times, they may have been reporting more than one outcome (e.g. genuine confession, true denial, false confession), which would have distorted the true denial rate. The figure for true denials for those interrogated once was obtained by adding together true confessions, false confessions, and false denials in Table 1 and subtracting it from the total number of participants (1052) in that group (data were missing in three cases).

In the present study, the base rate of guilt for those interrogated once was 67% for males and 57% for females, with a mean of 63% for the two groups. The difference in the base rate between males and females is significant ($\chi^2 = 12.76$, $df = 1$, $P < 0.001$) and is almost exclusively associated with the higher rate of false denials among males (i.e. 22% versus 11%).

3.4. *Rate of false confessions*

Out of the 1896 participants who had been interrogated by the police, 138 (7.3%) claimed to have made a false confession during custodial interrogation, which represents 1.6% of the total sample. Table 1 shows that the false confession figures for those interrogated only once are 4% and 3% for males and females, but these figures increase to 12% and 13%, respectively, for males and females, among those participants who had been interrogated more than once. This difference in the rate of false confession between those interrogated once and those interrogated more than once is highly significant ($\chi^2 = 52.57$, $df = 1$, $P < 0.001$).

3.5. *Age and false confessions*

The mean age of the false confessors was 17.6 (SD = 1.8) in contrast to 18.1 (SD = 2.1) of the other participants who had been interrogated by the police. This difference is statistically significant ($t = 3.09$, $P < 0.01$). The false confessors were divided into two groups according to age: 16 and 17-year olds and 18 years and older. This classification is consistent with legal definition of adulthood (majority) in Iceland. Out of the 1896 participants interrogated, 1878 had given their age, of which 931 (49.6%) were either 16 or 17 years old and 947 (50.4%) were 18 years or over. Of

Table 2

Mean scores and standard deviations on the tests for non-false confessors and false confessors, *t*-values, effect size for group differences, and Alpha coefficient for each measure

Measure	Non-false confessors <i>N</i> = 1740 Mean (SD)	False confessors <i>N</i> = 138 Mean (SD)	<i>t</i> -Value	Effect size	Alpha coefficient
Anxiety	5.7 (2.4)	6.3 (2.3)	−2.49*	0.26	0.79
Depression	17.7 (6.8)	20.3 (7.9)	−4.06***	0.35	0.90
Anger	9.1 (3.6)	10.7 (4.5)	−4.75***	0.40	0.85
Self-Esteem	18.4 (5.9)	21.3 (6.2)	−5.31***	0.48	0.89
Parental support	15.9 (3.9)	16.8 (3.2)	2.94**	0.25	0.87
Attitudes toward school	53.8 (7.0)	49.3 (10.3)	6.78***	0.52	0.83
Delinquency of friends	26.6 (5.6)	31.3 (9.6)	−8.56***	0.62	0.84
Delinquency of self	8.4 (4.0)	13.2 (9.0)	−11.67***	0.74	0.83

* $P < 0.05$.

** $P < 0.01$.

*** $P < 0.001$, all tests are two-tailed.

the younger group, 84 (9%) reported having made a false confession to the police, in contrast to 54 (5.7%) of the older group. This difference is significant ($\chi^2 = 7.6$, $df = 1$, $P < 0.01$).

3.6. Psychological/criminological variables and false confessions

Table 2 gives the mean scores and standard deviations on the psychological tests between those participants who claimed to have made a false confession to the police and the other participants who had also been interviewed by the police. The *t*-values show that significant differences between the two groups emerged on all the measures. The effect sizes for these significant findings were medium (range = 0.25–0.74). All the scales had satisfactory internal consistency (Alpha = 0.78–0.89).

In order to identify the independent variables that made the greatest contribution to discriminating between the two groups, a Stepwise Discriminant Function Analysis was performed on the test scores in Table 2. Three variables discriminated significantly between the two groups (Wilks' Lambda = 0.9327, $F(3, 1632) = 39.24$, $P < 0.001$). These were Delinquency (Wilks' Partial Lambda = 0.9663, $F(1, 1632) = 56.99$, $P < 0.001$), Depression (Wilks' Partial Lambda = 0.9945, $F(1, 1632) = 8.57$, $P < 0.01$), and Delinquency of friends (Wilks' Partial Lambda = 0.9962, $F(1, 1632) = 6.15$, $P < 0.05$).

4. Discussion

One of the main advantages of the study is that the sample is highly representative of young persons in Iceland. It gives a global picture for one country of young persons' involvement in police interrogations, and the prevalence of confessions and false confessions. It also provides for those interrogated once a base rate of guilt among those interrogated at police stations.

Self-report questionnaires have shown that many crimes peak in the age group 15–18 years (Blackburn, 1993) and the age range in the current study is therefore ideal for this kind of research.

It could be argued that the participants in the present study are not necessarily fully representative of young persons in the general population, because only those attending further education are included. Pupils, who do not complete their compulsory education at the age of 15, and those who do not attend further education, are likely to have more involvement with the police than the current sample (Stattin & Klackenberglarsson, 1993). Therefore, the figures presented in this paper about police interrogation and false confession may be a slight underestimate for all young persons in Iceland. Some evidence was found for this in the present study where the younger age group (16–17-year olds) were significantly more likely to report having made a false confession to the police than the older groups (18–25-year olds). The reason for this finding may be due to a higher drop out during further education among youths who are actively involved with offending and the police, making them susceptible to making a false confession. Nevertheless, in view of the extremely high proportion of 16-year olds who commence further education in Iceland (i.e. 93%; Statistics Iceland, 2005), the findings are likely to give a reasonably good picture of the interrogation, confession, denial, and false confession rate among young persons for the country as a whole.

An important finding is the number of participants (i.e. 641 or 7% of those interrogated) who claim to have made a false confession to the police during custodial interrogation. The rate of reported false confession was 3% for those interrogated only once, but was 12% among those interrogated by the police more than once. The 12% figure is identical to the figure found among Icelandic prison inmates in two previous studies (Gudjonsson & Sigurdsson, 1994; Sigurdsson & Gudjonsson, 1996). In a recent small study conducted immediately after police interrogation at Icelandic police stations, nine (19%) out of 47 suspects claimed to have made a false confession to the police at some time in their lives (Sigurdsson et al., *in press*). The majority (75%) of the suspects said that the police had previously interviewed them as suspects. Taken together, these findings suggest that some people who are frequently interrogated by the police are at a high risk of making false confessions. For them lying to the police either in terms of a false confession or false denial may be a part of their antisocial life style (Sigurdsson & Gudjonsson, 2001; Gudjonsson et al., 2004a).

Youth is commonly regarded a special vulnerability factor with regard to risk of false confession occurring during interrogation (Kassin & Gudjonsson, 2004; Redlich & Goodman, 2003). For this reason, in England suspects under the age of 17 are required by law to be interviewed in the presence of an appropriate adult, who is typically a relative (Medford, Gudjonsson, & Pearse, 2003). In Iceland the age of majority is 18. The present findings relating to the significantly higher rate of false confession among participants under the age of 18 confirm the need for caution when persons under the age of majority are being interviewed in order to avoid the risk of false confession.

The present findings confirm the findings of Sigurdsson and Gudjonsson (2001), Gudjonsson et al. (2004a, 2004b) that personality and individual differences are important in discriminating between false confessors and other suspects interrogated by the police. Significant differences emerged on all the test measures. The false confessors reported more anxiety, depression, and anger problems, poorer self-esteem, less parental support, more delinquency during the previous

one-year and more delinquency among friends. This means that they were more delinquent and emotionally disturbed than the other participants. The highly significant effect of delinquency among self and friends suggests that false confessions among youths are significantly related to their offending life-style.

The difference between the present study and the two previous community studies (Gudjonsson et al., 2004a, 2004b) is that in the present study it was specifically requested that participants reported interrogations that took place at police stations. In Iceland, suspects like those in the USA (e.g. Redlich, Silverman, Chen, & Steiner, 2004) are sometimes interviewed outside police stations (e.g. in police cars or at the scene of crime), but this procedure is less formal in Iceland (i.e. suspects are not normally read their rights or placed under arrest) and it was therefore not included in the present figures. In the previous community studies no distinction was made between interrogations that took place at a police station and those outside, which made the previous methodology less rigorous and probably explains the higher rate of reported interrogation in the two community studies (i.e. 25% as opposed to 18.5% in the present study).

The true confession rate of 53% for the total sample in the present study is similar to the confession rate found in previous Icelandic community studies, but it is important to recognise that this does not necessarily present an accurate confession rate per interrogation, because the participants were not required to give details about confessions, denials and false confessions for each of the times they were interrogated. The overall confession rate for the participants who had been interrogated only once was 46%, which represented 55.5% of the sample, was substantially lower than the figure for all the participants in the study who had given a confession to the police. It is likely that the true self-reported confession rate for each offence among the present sample lies somewhere between 46% and 53%.

The relatively high rate of true denials (i.e. one-third of those interrogated by the police once) in the present study emphasises the importance for the police not to ignore the fact that they may be interviewing a reasonably high proportion of people who are actually innocent of the crime of which they are accused. The base rate of guilt in the present study, which realistically could only be reliably obtained in relation to one interrogation (i.e. if there had been several interrogations they may have been referring to more than one outcome: confession, denial, false confession), was 67% for males and 57% for females, giving an average rate of 63%. The difference between the two genders was almost exclusively due to males more commonly reporting making false denials than females and females making more true denials than males. The confession rate was almost identical for the two groups. The implication is that more females than males are innocent of the crime they are interrogated about and are less likely to deny the offence if they are guilty (i.e. they are more honest during interrogation than males). Therefore, relying on confession rates without consideration of base rates of guilt or innocence can be misleading when comparisons are made between different groups. Unfortunately, in real life criminal cases the base rate of guilt or innocence is not known (Gudjonsson, 2003).

In the present study, no significant gender differences were found in relation to false confessions. This suggests that when females are as frequently involved in interrogations as males they are as likely as males to give false confessions during interrogation. However, these findings may not necessarily apply to the most serious female recidivists who are given custodial sentences. For example, Gudjonsson and Sigurdsson (1994) and Sigurdsson and Gudjonsson (1996), in their studies among prison inmates, found that false confessions were more commonly found among

female than male prison inmates. Females in both of the prison studies were particularly likely to confess falsely to protect somebody else.

This study has three main limitations. Firstly, the findings are dependent on self-report. It was not possible to corroborate the participants' accounts through official records and some participants may not have been accurate or honest about their involvement with the police. Secondly, in the present study the reasons for giving a false confession to the police were not investigated. Thirdly, the type and severity of the crime the students reported they had confessed to falsely is not known. It is possible that these factors influence the rate of false confession. For example, in the more serious cases (e.g. murder, violence, sexual offences) there is considerably more pressure in the police interview to obtain a confession than in the 'run-of the mill' cases (e.g. property offences, serious traffic violations), which will adversely affect the suspect's mental state whilst at the police station (Gudjonsson, 2003). However, even in the 'run-of the mill' cases, many suspects are in a disturbed mental state or under the influence of illicit drugs, which can influence how they cope with the police interview (Gudjonsson, Clare, Rutter, & Pearse, 1993; Pearse, Gudjonsson, Clare, & Rutter, 1998; Sigurdsson et al., in press).

The present findings provide important new information on the frequency of reported false confessions by young persons and demonstrate the importance of individual differences in false confession rates relating to offending life-style and mental health problems. It is hoped that similar studies are carried out in other countries so that cross-cultural comparisons become possible.

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