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The costs and benefits of boundary maintenance: stress, religion
and culture among Jews in Britain.

Kate Miriam Loewenthal
Vivienne Goldblatt
Guy Lubitsch
Tessa Gorton
Helen Bicknell
Deborah Fellowes
Amanda Sowden

Psychology Department
Royal Holloway University of London
Egham
Surrey
TW20 0EX

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Summary

This paper examined stress among two groups of orthodox Jews suggested to differ in the strength of the boundary of their religious group. Comparisons were made between the two groups, and with urban and rural groups studied by other researchers. Proportions of boundary-maintenance events (events whose threat had been caused or exacerbated by Jewishness), of severe events, and proportions and rates of regular, irregular and disruptive events were examined. Boundary maintenance events were higher among the more religiously-orthodox-affiliated group, and among whom religious observance was indeed reported to be higher. It was suggested that conditions of higher boundary-maintenance would be associated with higher rates and proportions of regular events, and lower rates and proportions of irregular and disruptive events. Generally, the analyses supported this expectation. Boundary-maintenance events themselves were somewhat less severe, though not less likely to be irregular or disruptive than other events. Depression was shown to be unrelated to boundary-maintenance events, and (surprisingly) unrelated to contextual threat when the effects of irregularity-disruption were controlled. Depression was however strongly related to irregular and disruptive events. The results are compared with those of related work, and suggest that the general lowering effect of affiliation to a religious group may be partly explained by the effects of boundary-maintenance which involves stress, but of a less depressogenic kind than the disruptive stress associated with conditions of low/no boundary-maintenance. The findings have implications for understanding the relations between culture and mental disorder.

The costs and benefits of boundary maintenance: stress, religion and culture among Jews in Britain.

The question underlying this paper is whether the stresses involved in maintaining group rules (religious standards) are greater than the stresses involved in living without such rules.

Boundary-maintenance is a term used freely in psychological, social-psychological and social-scientific writing. It refers to activities used to maintain separation between one system and another, where the separation may be between individuals or between groups. Boundaries are conventions - rules - preventing overlapping of groups (English & English, 1958; Worsley, 1970; Katzir, 1982; Jelen, 1990; Sivin, 1991).

A number of distinguished social scientists and theorists have considered the relations between forms of social life, particularly rituals and social relations, and social structures (Durkheim, 1933, 1951; Levi-Strauss, 1963; Douglas, 1966; Turner, 1969; Martin, 1981). The preoccupation of such theorists has been with social change, a topic with which we are not directly concerned here. However, the theorists have been concerned with forms of social structure and we start with the classic lead of Durkheim (1933) who contrasted traditional social groups with complex industrial societies, the former involving clear definitions of roles and rules (organic solidarity) than the latter more complex forms of social organisation. The groups we studied, "traditionally-" and "strictly-" orthodox Jews, were living in London in the complex society of Britain in the 1990s. While to some extent they may emulate the traditional social groups defined by Durkheim, they may resemble more closely (each group to a differing extent) what Turner (1969) has described as an effort after communitas - "community of more or less equal individuals submitting to the general authority of ritual elders", which may occur in large-

scale complex societies.

Martin (1981) has pointed out that the "preference for boundary and balance involves dynamic tension rather than ... static formalism". Douglas (1966) describes of boundaries as places of danger, involving activities which maintain the distinction between the pure and the polluted. In this paper we wish to consider whether the tension and danger inherent in boundary-maintenance has any detectable effect upon mental health.

Durkheim (1951) has developed the most influential ideas regarding social structure and psychopathology. Durkheim distinguished three forms of suicide: egoistic, the result of under-integration with the group; altruistic, resulting from over-integration, and anomic suicide. Anomy (rootlessness, lack of belonging) is a regular feature in modern society, and results in a lack of social influence in individual passions, leaving them without any checks. Anomy derives from man's activities lacking regulation and his consequent sufferings. Durkheim's thinking led to the suggestions that suicide and depression may be low in religious groups where social support is good (Pescosolido & Georgiana, 1989) and where belief in the meaning and purpose of suffering is high (Stack, 1992). Durkheim's thinking thus leads to the suggestion that boundary-maintenance activities, which involve regulation of life, confirmation of group belonging, and purpose, may involve less suffering than living in conditions of anomy.

Of the two groups of Jews we studied, it is suggested that the traditionally-orthodox, while by definition traditional, live in a more open relationship with the wider complex society than do the generally enclave communities of the strictly-orthodox. In this paper we also made some comparisons with other traditional religious groups, as well as with others with no known religious affiliation. We suggest a continuum regarding strength of group boundary, ranging from religious enclaves at one extreme (strong boundaries), through religious affiliates not living in enclaves

(moderate boundaries), to those with no affiliation (weak or no boundaries).

Maintaining boundaries may be both costly and beneficial. In this paper we examine the costs and benefits of boundary maintenance among orthodox Jews in Britain, in terms of stress.

As we conducted life-events stress interviews among orthodox Jews in Britain in the early 1990s, it appeared that life-events had often been caused or their threat exacerbated by the subject's Jewishness. For example, we heard of difficulties associated with observing Jewish religious precepts such as job loss resulting from Sabbath observance; we heard of economic and health difficulties associated with very large family size among the strictly orthodox; we heard of interpersonal difficulties resulting from failure to uphold rules and norms, particularly those governing marriage and sexuality; we heard of the fear aroused by the Iraqi missile attacks on Israel in the Gulf War among holocaust survivors or those with relatives in Israel; and we heard of ugly anti-semitic incidents in Britain. It also appeared that we were hearing very relatively little of the types of events reported in studies in communities in which there are fewer or no rules governing marriage and family life and religious observance: events such as marital break-up, family violence, promiscuity and lack of care.

Stress caused or exacerbated by Jewishness and Jewish observance may be seen as the cost of Jewish boundary maintenance. Is such a cost offset by lower levels of the types of stress which may occur in conditions of weak or absent boundaries? Thus the general question is how levels and types of stress relate to conditions of high and low boundary maintenance.

We addressed this question by first delineating three aspects of stress.

The first aspect of stress we call (Jewish) boundary-

maintenance. This involves threat caused or exacerbated by the person's Jewishness or Jewish observance. This may be voluntary, as when a person decides that they are going to observe the Sabbath even if this threatens their employment or livelihood, or involuntary as when the victim of an anti-semitic attack. Boundary-maintenance events may thus involve a proactive or reactive relationship to threat from without. They involve regulation, purpose and/or confirmation of group membership.

The second aspect of stress is contextual threat. Following Brown & Harris (1978, 1989), this is defined, for any given life-event or difficulty, as the threat that would be experienced by the average person with the same background and in the same circumstances. In this paper, we focus on long-term threat, that which pertains two or more weeks after an event, showing no sign of immediate abating.

The third aspect of stress is regularity versus irregularity and disruptiveness (Prudo, Harris & Brown, 1984). Life-events involve social role transitions, and some transitions are standard, found and expected in all populations (such as birth, marriage death). These are regular. Other transitions are irregular, less standard transitions, such as changing social ties. Other transitions are disruptive, in which the social fabric is threatened through neglect or disruptions such as assaults, burglaries, divorce or unnatural death. Prudo et al found relatively higher rates of regular events among women living in conditions of higher social integration (crofting, churchgoing women in the Hebrides), and higher rates of irregular and disruptive events among women living in conditions of lower social integration (non-crofting, non-churchgoing Hebrideans, and women in Camberwell, London). Gaminde, Uria, Padro, Querejeta & Ozamiz (1993) in a study in the Basque country also showed higher rates of disruptive (severe) among women in conditions suggesting lower integration with the traditional lifestyle. It is therefore suggested that this aspect of stress (regularity) may therefore be reflected in

conditions of high and low boundary-maintenance.

We considered data from the two groups of Jews interviewed: those affiliated to strictly-orthodox synagogues, and those affiliated to traditionally-orthodox synagogues. The former are more likely to live in one of several relatively small geographical areas, to adhere more strictly to the requirements of Jewish law, to live close to amenities that will facilitate this adherence (such as synagogues, shops selling kosher food, schools providing an acceptable level of Jewish education, ritual bath-houses and so on. The strictly-orthodox have less contact with non-Jews and non-Jewish culture and entertainment: for example many will not have television. We suggest that the former maintain stronger boundaries than the latter, and we attempted to validate this suggestion by examining the proportion of boundary-maintenance ("Jewish") stress to other forms of stress in the two groups. We then examined the two other indices of stress (contextual threat, and disruptiveness) to see how these related to boundary-maintenance (religious affiliation) and its events. We also looked at outcome (case depression) in relation to the indices of stress examined ("Jewish" /boundary-maintenance stress, contextual threat, and disruptiveness).

We also compared aspects of our data with data from Prudo et al (1984) involving other groups of people about whom there was sufficient information comparable to that with which we are concerned in this paper.

Religion has been shown to play diverse roles in relation to mental health, both among Jews and among other groups (e.g. Batson, Schoenrade & Ventis, 1993; Loewenthal, 1995).

This exploration of the costs and benefits of boundary maintenance is novel, and is important for understanding the relations between religion, forms of social organisation and mental health, perhaps particularly in the case of religious, cultural and ethnic minorities.

Method

Subjects

The Jews studied were recruited from orthodox synagogue membership lists (N=339: 182 women and 157 men; mean age 52.4 years). It is estimated that most Jews maintain synagogue affiliation because of the importance attached to Jewish burial which is normally guaranteed to synagogue members and their families (Waterman & Kosmin, 1986).

160 of those interviewed were affiliated to a constituent of the United Synagogue (traditional or middle-orthodox), and 179 were affiliated to a member synagogue of the Union of Orthodox Hebrew Congregations (strictly-orthodox). The terms traditional- and strictly-orthodox refer to the synagogue of affiliation and do not refer directly to level of religious observance which varied within each group. The strictly-orthodox comprised a number of groups espousing somewhat differing philosophies regarding relations with the "outside world", including hasidic and litvish groups advocating minimal contact from a fear of corruption, yekkes advocating good citizenship and pleasantness to all, and Chabad-hasidic advocating outreach. All had in common strict orthodoxy, and the fact that all were living in one of the two strictly-orthodox enclaves in London (Stamford Hill or Golders Green and its environs) having the amenities required for strictly-orthodox living (synagogues, schools, ritual baths, kosher food shops, supplies of religious ritual requirements).

Compared to the middle-orthodox, the strictly-orthodox tend to live in close-knit communities, adhere to the dietary and other religious laws more closely, and are more likely to have large families, to have received more Jewish education and to send their children to Jewish schools (Kosmin & Levy, 1983; Waterman & Kosmin, 1986; Loewenthal et al, 1993). Stable marriage is

fairly normative in both groups, with a strong focus on family life, involving the religious calendar, rites of passage, and the care, education and upbringing of children. Types of employment and social attitudes may differ from those of the general population. Jews are, of course, a minority group and at risk of racist abuse and other disadvantages of minority group status. Many members of the Jewish community (particularly the strictly-orthodox) are survivors of the Nazi holocaust, or the children or grandchildren of survivors.

Subjects were recruited by first writing to and then telephoning one household in five from lists of members of traditional and strictly orthodox synagogues in the greater London area. Available adult household members were asked if they would be interviewed. In 269/460 (58.5%) of households contacted, at least one adult agreed to be interviewed. In 70 of these households, two or more adults were interviewed, usually husband and wife. The sample and its characteristics are described more fully in Loewenthal et al, 1995). In order to undertake this study, it was necessary to obtain approval and consent for the investigation from rabbis and communal leaders; prospective interviewees were prepared to accept this as a sign of our trustworthiness. The most common reason for refusal to participate was "too busy".

Measures

The measures used in this study were derived from a stress interview, the LEDS (Life Events and Difficulties Schedule) (Brown & Harris, 1978), slightly modified for use on the target population. The modifications involved the inclusion of questions on: difficulties associated with finding a marriage partner; anti-semitism; involvement with religious cult or missionary groups. Subjects were interviewed about events and difficulties in the 12 months prior to interview, and prior to onset of symptoms where these had been ongoing for more than 12 months.

Completed interviews were written-up and coded using LEDS coding dictionaries and precedents, consensus meetings, and liaison with Tirril Harris and the Medical Research Council team in the Social Policy department at Royal Holloway University of London. A team of seven collaborated on the interviews and coding; all were trained in the use of the LEDS by Tirril Harris. Since all had some knowledge of the main constructs used in this research, interviews were written-up in such a way that coding of events, difficulties and other independent and mediating variables were done independently of the coding of symptoms.

Other material collected included demographic and biographical information, information on current social circumstances and religious observance, and on current and recent distress and psychiatric symptoms (Loewenthal et al, 1995). Case depression was assessed from symptoms judged to be present from a shortened form of the PSE (Present State Examination: Wing, Cooper & Sartorius, 1974), extended to date onset and offset of symptoms in the 12 months before each interview (Brown & Harris, 1978). The criteria for case depression were: persistent and uncontrollable depressed mood plus four or more of: inefficient thinking, loss of concentration, brooding, loss of interest, hopelessness, suicide plans, self-deprecation, appetite loss, delayed sleep, early waking, retardation. These ("Bedford College") criteria are very similar to DSM-III major depressive disorder.

Ratings of events

Each event was rated as a Jewish boundary-maintenance event as follows:

1=the event was caused or its threat exacerbated by the subject's Jewishness or Jewish observance, e.g. anti-semitism, employment and relationship events caused by observance or breaking of religious regulations, events associated with Jewish rites of passage.

0=the event was (probably) not caused nor was its threat exacerbated by the subject's Jewishness or Jewish observance e.g. illness, death, burglary, examinations, most employment, financial and relationship events.

Measures of contextual threat were based on Brown & Harris's (1978) codings of contextual threat and other relevant factors.

Contextual threat is the amount of threat which would be experienced by anyone with the background and in the circumstances of the subject. Ratings were made on a 4-point scale, where:

- 1=marked threat/unpleasantness
- 2=moderate threat/unpleasantness
- 3=some threat/unpleasantness
- 4=little threat/unpleasantness.

Short-term threat is that experienced in the period following the event immediately afterwards and up to two weeks later. Long-term contextual threat is that experienced two weeks after the event. A severe event is any event rated 1 on long-term contextual threat, or an event rated 2 which is also rated as high-moderate (rather than low-moderate) and which is also focused on the subject (either alone, or jointly with one or more others, rather than on others).

Ratings were also made whether each event was regular, irregular or disruptive, using the guidelines and examples of Prudo, Harris & Brown (1984):

0=regular event involving standard transitions, found and expected in all populations, such as birth, death, marriage, and associated rites of passage;

1=irregular event, involving less standard transitions, such as changing social ties, moving house, changing job or work responsibilities;

2=disruptive event, in which the social order is threatened through neglect or disruption, such as assault, burglary, divorce or unnatural death.

Checks on inter-rater reliability showed agreements of 90%, which is similar to the figure of 91% reported by Brown (1989).

Results

1. Religious observance in the two groups studied.

As a preliminary step, we compared aspects of religious observance by those in the two groups studied. This was necessary to validate the suggestion that those affiliated with the more strictly orthodox Union of Orthodox Hebrew Congregations will report higher levels of religious observance than those affiliated to the ("traditionally-orthodox") United Synagogue, and may thus live in conditions of stricter boundary-maintenance. Table 1 summarises the results of these comparisons, which do show significant differences in the expected direction with respect to each aspect of religious observance reported by the subjects.

Table 1

2. Group differences in Jewish boundary-maintenance, severe and non-severe, and regular, irregular and disruptive events.

Table 2 shows some of the characteristics of the 1125 events reported by the 339 subjects, giving the proportions of severe and non-severe, Jewish boundary-maintenance and other, and regular, irregular and disruptive events. Since analyses of these events involves information from non-independent sources, a second database was constructed by random selection of one subject from each household, and by further random selection of one event from each subject selected. This second database comprised 232 events and all relevant inferential statistics were carried out using this database. Table 2 also enables comparisons with London and Hebridean women examined in other

studies (Gaminde et al reported rates of regular, irregular and disruptive events for severe events only, so have not been included in table 2). In spite of procedural differences in reaching subjects, it should be noted that all the samples represented in table 2 and elsewhere are believed to be representative of the communities studied.

Table 2

Jewish boundary-maintenance events were as expected relatively more likely among the strictly-orthodox-Jews than among the traditionally-orthodox ($X^2=16.55$, $p=.000$). Similar proportions of events were severe among the two groups of Jews studied, and these proportions (of the order of 15%) were similar to those among London and Hebridean women described by the Brown, Harris and Prudo group.

Note that these proportions of the order of 15% are the proportions of all events reported; the proportion of subjects reporting at least one severe event in the year prior to interview was 24% (80/339). This is intermediate between the percentages reported for urban/non-traditional groups of women of 31% (London) and 32% (Bilbao), and those reported for rural/traditional groups of women (21% - Hebrides; 16% and 10% - suburban and rural Basque)(Gaminde et al).

Both groups of Jews resembled the Hebridean women reported by Prudo et al with respect to proportions of irregular and disruptive events. Both groups of Jews differed from the London women reported by Brown & Prudo (1981) and Prudo et al: the Jewish groups had higher rates and proportions of regular events and lower rates and proportions of irregular and disruptive events.

Analyses of gender differences in proportions of Jewish boundary-maintenance and severe events showed no other significant gender differences.

A separate analysis examined rates (rather than proportions) of different types of events. These analyses are not shown in detail, since their upshot is similar to that reflected in table 2. There were no striking gender differences apparent, with the exception that among the strictly-orthodox, the men had somewhat lower rates of regular events and somewhat higher rates of irregular and disruptive events than the women. This appears to reflect strictly-orthodox norms regarding gender-appropriate relations with the "outside" world, in which men are relatively more likely to be involved especially with regard to making a livelihood for their families, while women are relatively more involved in running their (usually very large) households.

As stated, direct comparison with Gaminde et al's data was not possible, since these authors reported severe events only, but Gaminde et al's figures do show lower rates of irregular and disruptive severe events in the more traditional and rural of the Basque communities studied.

3. Inter-relations between Jewish boundary-maintenance and other aspects of stress.

Table 3 shows the proportions of Jewish boundary-maintenance events which were severe and non-severe, and which were regular, irregular and disruptive. (Table 3 is derived from the database of 232 independent events, one from each household studied, selected randomly).

Table 3

No consistent relationships appear in the data in table 3. Other

analyses however showed that:

1. Jewish boundary-maintenance events were less severe in long-term contextual threat ratings (mean=3.65 on the 1-4 scale described above, where 1 lower number indicates a higher degree of threat) than other events (mean=3.33, 2-tailed $t=2.66$, $p=.009$);
2. Jewish boundary-maintenance events were also less severe on short-term contextual threat (mean=3.13) than other events (mean=2.58, 2-tailed $t=3.88$, $p=.000$);

Thus there was partial support for the conclusion that boundary-maintenance events were less threatening than other events, but table 3 suggests that the effects were not striking.

4. Depression.

In this section we examine one mental health corollary of the social conditions studied: case depression. The relationship between case depression and contextual threat was shown among those interviewed in Loewenthal et al (in press). This follows many other reports of a similar relationship among other groups of people (Brown & Harris, 1978, 1989; Lora & Fava, 1992; Gaminde et al). Table 4 shows the striking relationship between case depression and the occurrence of irregular and disruptive events. A loglinear analysis (following West, 1991) examined the relations between case depression as an outcome, and the three aspects of stress examined in this study: Jewish boundary maintenance, contextual threat and regularity-irregularity-disruptiveness. (The contextual threat measure was whether the subject had experienced at least one "provoking agent" (either a severe event as defined in this paper, or a major difficulty), prior to the onset of any depression). The relationship between irregular and disruptive events and case depression was again significant (partial $X^2=7.00$, $p=.030$) (with other factors controlled), but Jewish boundary-maintenance and provoking agent did not relate significantly to case depression.

Table 4

The striking effect is that irregularity-disruptiveness was more strongly associated with case depression than the contextual threat measure. Both measures are associated ($X^2=23.92$, $p=.000$) but their separate relations with depression come as something of a surprise, possibly suggesting that at least some of the effects of contextual threat may operate only via their association with disruptiveness, whose effects in turn may depend on cognitive processes to do with issues such as control, helplessness, and hope. This finding deserves investigation in further work, and may be related to a recent suggestion by Brown, Harris & Hepworth (1995) that the crucial depressogenic agents of loss are those involving humiliation and/or entrapment.

Given that conditions of high boundary-maintenance may also involve relatively lower rates of irregular and disruptive events, it would be expected that (other things being equal), lower prevalence of depression may go along with conditions of higher boundary-maintenance. Table 5 compares prevalence of onset case depression in the year prior to interview, among subjects in the present study, with prevalence from Brown & Harris (1978) and Brown & Prudo's (1981) (table 5).

Table 5

The two groups in the current study were suggested to differ in the extent of boundary-maintenance, but table 5 shows that they do not differ in prevalence of onset case depression. Table 5 however shows resemblance in prevalence of onset case depression between the Jews in the present study, and Hebridean churchgoing women. Prevalence of onset case depression were much lower in

these latter three groups than in groups in which boundary-maintenance may have been lower: non-churchgoing Hebridean women, and Camberwell women.

Discussion and conclusions

This paper dealt with Jewish boundary-maintenance events, and compared the proportions of such events among strictly and traditionally orthodox Jews. Proportions of severe events, and proportions and rates of regular, irregular and disruptive events were also examined, and comparisons were made with groups studied by other researchers. The findings show, first that boundary maintenance events were indeed higher among the more religiously-orthodox-affiliated group, and among whom religious observance was indeed reported to be higher. It is suggested on the basis of Prudo et al that conditions of higher boundary-maintenance would be associated with higher rates and proportions of regular events, and lower rates and proportions of irregular and disruptive events. Generally, the analyses supported this expectation. Boundary-maintenance events themselves were somewhat less severe, though not less likely to be irregular or disruptive than other events. Finally, depression was shown to be unrelated to boundary-maintenance events, and was also unrelated to contextual threat when the effects of irregularity-disruption were controlled. Depression was however strongly related to irregular and disruptive events, which were more likely in conditions of low/no boundary-maintenance.

It is suggested that boundary-maintenance in itself involves a large number of activities and events giving a life-style which may be characteristically busy and purposeful: regulated and non-anomic in Durkheim's terms. Though stressful, the stress is not depressogenic. High boundary-maintenance was associated with lower proportions and rates of depressogenic (irregular and

disruptive) events (though boundary-maintenance events in themselves are not always less likely to be irregular or disruptive). This accords with other work showing lower rates of irregular and disruptive events in conditions of higher integration with a traditional lifestyle (Prudo et al; Gaminde et al). Our analyses show that it may be irregularity and disruptiveness which predict depression rather than contextual threat.

This conclusion may be enriched by a consideration of Brown et al's (1995) recent suggestion that humiliation and entrapment are the crucial depressogenic aspects of loss: depressogenic events are those which attack self-esteem, rank, or value especially in relation to core roles, and from which there is no escape. It is very likely that regular events are those which do not entail humiliation or entrapment, indeed are events may maintain or enhance self-esteem, rank and value. Although in this study events were not coded for humiliation/entrapment, the overlapping meaning of humiliation/entrapment and irregularity/disruptiveness suggest converging conclusions from our analysis with those of Brown, Harris & Hepworth.

The findings suggest that where variations in boundary-maintenance are associated with variations in prevalence of depression, this effect is at least partly the result of the impact of boundary-maintenance on the quality of stress, especially the decreased likelihood of irregular and disruptive events.

The analyses suggest further possibilities for understanding issues to do with culture and mental disorder, such as the question of by what means religion may be associated with lower prevalence of depression (Loewenthal, 1995). The findings underscore the importance of taking into account social organisation and social integration in understanding issues relating to religion, minority group status and mental health.

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References

- Brown GW, Harris TO (1978) *The Social Origins of Depression*. Tavistock Press, London.
- Brown GW, Harris TO (eds) (1989) *Life Events and Illness*. Unwin Hyman, London.
- Brown GW, Harris TO, Hepworth C (1993) Loss, humiliation and entrapment among women developing depression: a patient and non-patient comparison. *Psychol Med* 25:7-21.
- Brown GW, Prudo R (1981) Psychiatric disorder in a rural and in an urban population: 1. Aetiology of depression. *Psychol Med* 11:581-599.
- Douglas M (1966) *Purity and Danger*. Routledge & Kegan Paul, London
- Durkheim E (1933) *The Division of Labour in Society*. (Trans G Simpson) MacMillan, New York.
- Durkheim E (1951) *Suicide*. (Trans JJ Spaulding, G.Simpson) Free Press, Glencoe, Illinois.
- English HB, English AC (1958) *A Comprehensive Dictionary of Psychological and Psychoanalytical Terms*. Longmans, New York. Green & Co.
- Gaminde I, Uria M, Padro D, Querejeta I, Ozamiz A (1993) Depression in three populations in the Basque country - a comparison with Britain. *Soc Psychiat Psychiat Epidemiol* 28:243-251.
- Jelen TG (1990) Ageing and boundary maintenance among American Evangelicals. *Rev Rel Res* 31:268-279.
- Katzir Y (1982) Preservation of Jewish ethnic identity in Yemen

- segregation and integration as boundary maintenance mechanisms. *Comp Studs Soc Hist* 264-279.

Kosmin BA, Levy C (1983) *Jewish Identity in an Anglo-Jewish Community*. Research Unit Board of Deputies of British Jews, London.

Levi-Strauss C (1963) *Structural Anthropology*. (Trans C Jacobson, BG Schoepf) Basic Books, New York.

Loewenthal KM (1995) *Religion and Mental Health*. Chapman & Hall, London.

Loewenthal KM, Goldblatt V, Amos V, Mullarkey S. (1993) Some correlates of distress in Anglo-Jewish women. In L Brown (ed) *Religion, Personality and Mental Health*. Springer-Verlag, New York.

Loewenthal K, Goldblatt V, Gorton T, Lubitsch G, Bicknell H, Fellowes D, Sowden A (1995) Gender and depression in Anglo-Jewry. *Psychol Med* 25:1051-1063.

Lora A, Fava E (1992) Provoking agents, vulnerability factors and depression in an Italian setting: A replication of Brown and Harris's model. *J Aff Disord* 24:227-235.

Martin B (1981) *A Sociology of Contemporary Cultural Change*. Blackwell, Oxford.

Pescosolido B, Georgiana S (1989) Durkheim, suicide and religion. *Am Soc Rev* 54:33-48.

Prudo R, Harris T, Brown GW (1984) Psychiatric disorder in a rural and in an urban population: 3. Social integration and the morphology of affective disorder. *Psychol Med* 14:327-345.

Sivin N (1991) Science, religion and boundary maintenance. *Contemp Soc* 20:526-530.

Stack S (1992) Religiosity, depression and suicide. In J Schumaker (ed) *Religion and Mental Health*. Oxford University Press, Oxford.

Turner V (1969) The Ritual Process: Structure and Anti-Structure. Routledge & Kegan Paul, London.

Waterman S, Kosmin BA (1986) *British Jewry in the Eighties*. Research Unit Board of Deputies of British Jews, London.

West R (1991) *Computing for psychologists*. Harwood Academic Publishers, Chur.

Wing JK, Cooper JE, Sartorius N (1974) *The Measurement and Classification of Psychiatric Symptoms*. Cambridge University Press, London.

Worsley P (1970) *Introducing Sociology*. Penguin, Harmondsworth, Middlesex. Table 1. Comparison of Strictly and Traditionally-Orthodox subjects with respect to reported religious observance (all means are on a scale from 1=fully observed to 4=never observed).

	Strictly Orthodox	Traditionally Orthodox	All	t	Significance of t
N	179	160	339		
Prayer/ Synagogue	1.83 sd=0.85	2.61 sd=0.76	2.21 sd=0.90	8.81	p=.000
Religious study	2.08 sd=1.19	3.51 sd=0.84	2.77 sd=1.26	12.41	p=.000
Attendance at public study	2.36 sd=1.10	3.36 sd=0.85	2.83 sd=1.11	8.96	p=.000
Observance of dietary laws	1.01 sd=0.15	1.55 sd=0.85	1.27 sd=0.65	7.94	p=.000
Sabbath observance	1.02 sd=0.17	1.73 sd=0.87	1.36 sd=0.71	10.16	p=.000
Festival observance	1.01 sd=0.15	1.36 0.64	1.18 sd=0.49	6.66	p=.000

Table 2. Proportions of different types of events

	Severe	Not severe	Jewish	Not Jewish	Regular	Irregular	Disruptive
All events n=1125	17% 190/ 1100	83% 910/ 1100	26% 280/ 1067	74% 787/ 1067	62% 662/ 1067	36% 388/ 1067	2% 17/ 1067
Events (independent sources) ** n=232	14% 31/ 221	86% 190/ 221	33% 70/ 210	67% 140/ 210	57% 120/ 210	39% 81/ 210	4% 9/ 210
Events (independent) among strictly-orthodox	15% 18/ 120	85% 102/ 120	44% 55/ 124	56% 69/ 124	65% 80/ 124	31% 38/ 124	5% 6/ 124
Events (independent) among traditionally-orthodox	13% 13/ 101	87% 88/ 101	17% 15/ 86	83% 71/ 86	46% 40/ 86	50% 43/ 86	4% 3/ 86
London women	16%* ¹ 225/ 1400	84%* ¹ 1175/ 1400	-	-	43%* ³ 127/ 292	43%* ³ 126/ 292	13%* ³ 39/ 292
Hebridean women	14%* ² 59/ 416	86%* ² 357/ 416	-	-	53%* ⁴ 111/ 209	44% ⁴ 93/ 209	2%* ⁴ 5/ 209

** These 232 events from independent sources were obtained by random selection of one subject per household, and one event per subject.

*1 London women (Camberwell community sample. Brown & Prudo, 1981)

*2 Hebridean women (Lewis community sample. Brown & Prudo, 1981)

*3 London women (Camberwell community sample. Prudo, Harris & Brown, 1984)

*4 Hebridean women (Lewis community sample. Prudo, Harris & Brown, 1984).

χ^2 (using events from independent sources for the Jewish sample) showed the following effects of group:

Severe events: no significant effects;

Jewish boundary-maintenance events: significant differences between strictly and traditionally-orthodox (16.55, $p=.000$);

Regular-irregular-disruptive events: no significant effects of strictly versus traditionally-orthodox; significant differences between strictly-orthodox and both London (17.02, $p=.0002$) and Hebridean samples (6.97, $p=.031$); significant differences between traditionally-orthodox and London sample (6.66, $p=.035$), but no difference from Hebridean sample (1.19, $p>0.05$).

In summary, the strictly-orthodox show higher proportions of regular events than others, while London women show higher proportions of irregular and (especially of) disruptive events than others.

These comparisons must be viewed with caution, since the frequencies for London and Lewis women were not from independent sources.

Disruptive events among Hebridean and London women were described by Brown & Prudo (1981) as of the following types: Burglary/damage to property, fires, assaults, police/litigation, divorce, shocking revelations, serious rows, relatives' suicide attempts. Among the Jewish sample, disruptive events were: anti-semitic assaults (6), burglary/mugging/damage to property (9), fire (1), divorce (1).