Inclusion in Israel: coping resources and job satisfaction as explanatory factors of stress in two cultural groups

Orna Braun-Lewensohn
Ben-Gurion University of the Negev

Key words: Coping resources, stress, special education, regular class, teachers.

The aim of this study was to explore the differences between the two cultural groups of Jewish and Arab teachers on several variables and to analyse their link to stress. Specifically, I examined sense of coherence (SOC), sense of school community and job satisfaction among regular Jewish and Arab teachers in regular schools and classes who have special education students in their classes. Furthermore, I investigated how the different coping resources – SOC and sense of school community – explain the stress reactions of state anxiety and state anger directly and indirectly via job satisfaction and also the direct prediction of stress by job satisfaction.

Data were gathered from 634 Jewish and Arab teachers (80% Jews) who completed self-report questionnaires that measured SOC, sense of community, employee satisfaction inventory, state anxiety and state anger.

Differences in SOC and sense of school community were found between the two groups such that Jews reported stronger SOC, and Arabs reported stronger sense of school community. Further differences were revealed in the links of the different coping resources to stress reactions. The results are discussed against the backdrop of cultural background and the salutogenic model.

The main goal of this study was to examine how coping resources of sense of coherence (SOC), sense of school community and job satisfaction as well as demographic background explain stress reactions of state anxiety and state anger. This model was explored against the backdrop of the complicated and conflictual situation of teaching special education children, who are integrated in regular classes, without the help of teachers’ aids in class. I examined whether Jewish and Arab teachers differ with respect to the variables of the study. Moreover, I differentiated between the two cultures – Jews and Arabs – to probe the issue of whether these variables are similarly linked to job satisfaction and stress in both cultures.

Research background
Recent decades have seen many children with special needs integrated in regular classes that are part of the regular school system in Israel (Hyman and Olnik-Shemesh, 2004). These children are entitled to special financial support from the government. More specifically, 121,613 children that comprise 7.2% of the entire Israeli population are entitled to this kind of support. Jewish and Arab children in Israel study in separate school systems supported by ministry of education. The breakdown of the proportion of students who are entitled to this support is 7.2% of the Jewish Israeli population and 8.5% of the Bedouin population (Zionit, Berman and Ben-Arie, 2009). A partial explanation for the higher proportion of Bedouins who are diagnosed as kids with special needs is the cultural tradition of intermarriage within the families (Abu Bader and Gradus, 2010). The goal of the integration/inclusion programmes is to fit these children into regular classes while emphasising a ‘normal’ curriculum. Within the integration/inclusion setting, the student receives some assistance outside the regular class, but most of his/her studying takes place in the regular class where he/she receives no extra help. Most of these children are children with learning disabilities, and these children are the focus of this study. The modification of curriculum for each student is accomplished by identifying the needs of each student according to their disability and by designing accommodations for learning in accordance with the educational needs (Bourke and Carrington, 2007).

Teaching is one of the most stressful professions worldwide (Johnson et al., 2005). Research on teacher stress has shown that the teachers who suffer the most stress tend to be those who are less tolerant of their students (Kokkinos, Panayiotou and Davazoglou, 2005) and who have poorer relationships with students who they perceive as challenging (Johnson, 2000; Yoon, 2002). As a result, the students who have conflicted relationships with their teachers are those who have problems adjusting to, and achieving within, the school context (Baker, 2006). A recent review
has shown that teachers suffering from high stress levels harbour more negative emotions towards their students than their colleagues with less stress, and those emotions invariably impair their ability to extend their students the support they need (Jennings and Greenberg, 2009). Therefore, it is important to explore the stressful situation of enrolling special education students in regular classes with no teacher assistance and the coping resources available to teachers that may enable them to successfully contend with this challenging situation.

Ethnic minorities in Israel

Israel is a culturally diverse society in which several minority groups exist alongside the Jewish majority. About 25% of the state’s population is made up of minorities, of which 84% are Muslim (Statistical Bureau, 2010). Since the establishment of the State of Israel in 1948, although Arab Muslims in Israel have been ‘Westernised’ to some extent, they continue to maintain their own traditions and values (Smoooha, 1989). Despite having undergone a certain modernisation, their way of life is still far less modern and secular than that expressed by the dominant secular Jewish culture. In addition to being an ethnic, religious, linguistic and cultural minority, Muslim Arabs in Israel are also a national minority.

The Bedouin of the Negev are a special subgroup of the Muslim Arabs in Israel who have inhabited the Negev desert since the fifth century CE. Traditionally, they have been organised into nomadic or semi-nomadic tribes, but in the past half century, they have experienced a rapid and dramatic transition. Approximately half of the population has been resettled into seven urban-style settlements by the government. This move from traditional semi-nomadic life to urban settlements has had both social and economic consequences. For example, the Bedouin population is characterised by low-income levels, and the settlements provide fewer services to their residents compared with those offered in Jewish settlements (Abu Saad, 2003; 2004), a reality that places them at greater risk (Guo et al., 2002). Given the relatively poorer infrastructure of the Bedouin Arab schools, the high figures of special education children reported, and getting special aid from the country is encouraging (Ashencaen Crabtree and Williams, 2011). The identity of this minority is complex as well. On the one hand, they are a distinct population, separate from other Arab countries, but as citizens of Israel, they have yet to be integrated into Israeli society (Abu Saad, 2006). This study was conducted in Bedouin cities and villages, and the participating teachers are Bedouin Arabs from southern Israel and Arabs from northern Israel who migrated to, and live and work in, the south.

The salutogenic model and SOC

Approximately 30 years ago, Antonovsky (1979) suggested a new model and concept in stress research, ‘salutogenesis’, which means the ‘origin of health’. In a continuum model, it suggests that rather than classify a person’s state of health dichotomously as either healthy or ill, each individual at any given moment is somewhere on the health ease/dis-ease continuum (Antonovsky, 1987). According to this model, people have general resistance resources (GRRs) that help them conceptualise the world as organised and understandable. SOC represents the motivation and the internal and external resources one can use to cope with stressors, and it plays an important role in the way one perceives challenges throughout life. Globally oriented, SOC is an enduring tendency to see the world as more or less comprehensible (the internal and the external world are perceived as rational, understandable, consistent and expected), manageable (the individual believes that she/he has the resources needed to deal with situations) and meaningful (the motivation to cope and the commitment to emotionally invest in the coping process; Antonovsky, 1987).

The salutogenic model suggests that an individual with a strong SOC is less likely than one with a weak SOC to perceive stressful situations as threatening, and, thus, anxiety provoking. Given their tendency to perceive the world as meaningful and manageable, individuals with a strong SOC will be less likely to feel threatened by stressful events, and as a result, they will better equipped to adjust to these events (Braun-Lewensohn, Sagy and Roth, 2011; Sagy, 1998; 2002).

Antonovsky (1979) further argued for the importance of a stable culture in providing individuals with a strong SOC. Yet in the case of a society in change, the maintenance of a stable SOC depends on the flexibility with which people approach and respond to new demands (Antonovsky, 1987).

A few studies have investigated the question of cultural differences in SOC levels. Bowman (1996) investigated Anglo-Americans and Native Americans and supported Antonovsky’s (1987) claim that people from totally different cultures can attain the same SOC levels. Furthermore, the association between a strong SOC and health was supported in both cultures and in additional studies that compared Chinese, Japanese and Americans (Bowman, 1996; Lee et al., 2002). However, other studies from around the world showed a different picture. First, a couple of studies have shown that SOC is weaker among minority groups (Braun-Lewensohn and Sagy, 2011; Glanz, Maskarinec and Carlin, 2005), a finding that may also be linked to weaker relationships between SOC and stress reactions (Eriksson and Lindström, 2005). Furthermore, when comparing Bedouin-Arab adolescents with Jewish adolescents during the highly stressful situation of war, SOC did not contribute to the well-being of Bedouin adolescents as it did to that of Jewish adolescents (Braun-Lewensohn and Sagy, 2011). Thus, because the role of SOC among more traditional, cultural groups is not clear, and it should be investigated further in different settings.

Sense of community

In recent decades, research interest in the idea of communities, belonging to communities, and the assets of the
community for its members has been growing. In an era of
globalisation, it is emphasised that community is a con-
struct that crosses borders and cultures. Globalisation leads
to the need for belonging and social support (Fisher, Sonn
and Bishop, 2002). ‘Sense of community’, in addition to
describing bonding, trust and group membership (Perkins,
Hughery and Speer, 2002), indicates the mutual concerns
and shared values of group members, who have great
concern for community issues and a sense of connection
(Goodman et al., 1998). According to Davidson and Cotter
(1991), sense of community is a personal quality connoting
a strong attachment between people and their communities.
Sense of community is not the result of concrete experience,
but rather, it is a way of thinking in which the individual
is part of a community that is or will be available when
she/he needs it.

McMillan and Chavis (1986) defined the concept of sense
of community in terms of four elements: (1) membership
refers to a sense of belonging and identification, emotional
security, availability of personal space, personal investment,
and a common symbolic system; (2) influence includes
an individual’s interest in a community in which she/he
believes that she/he has some influence (directly and indi-
rectly) and conformism; (3) integration and fulfilment of
needs include dimensions that strengthen sense of togeth-
erness in the community and the confidence, among the
members of the community, that each individual will fulfil
his/her obligations; (4) shared emotional connections refer
to the level and quality of the connection between the dif-
f erent members of the community who share important
events and experiences and who cope together to solve
common problems that are part of their common history.
Empirical research on the model suggests that these ele-
ments are interrelated and that they constitute a relatively
cohesive construct (Chavis et al., 1986; Davidson and

Research on the concept of sense of community indicates
that people who have a strong sense of community will feel
a correspondingly strong connection to it and will see them-
theselves as able to influence the community and to be influ-
enced by it. They will believe that their needs are being met
in the collective, and they will feel obligated to the com-
munity to which they belong (Davidson and Cotter, 1991).
Indeed, a strong sense of community seems to be among
the attributes of resilient communities (Ahmed et al., 2004;
Landau and Saul, 2004; Pfefferbaum et al., 2005; Tse and
Liew, 2004).

Related to a higher quality of life and a sense of well-being
and negatively linked to loneliness (Chipuer, Bramston and
Pretty, 2003; Pretty, Andrews and Collett, 1994), a strong
sense of community helps protect community members
from developing symptoms of depression (Moscardino
et al., 2010), from post-traumatic stress symptoms and
other emotional reactions evoked by different kinds of
stress (Betancourt, 2004; Miller, 1996). In the school
context, teachers who report good communication among
staff and a strong sense of collegiality express lower levels
of stress and higher levels of job commitment and job
satisfaction (Kyriacou, 2001).

Studies in the community psychology domain emphasise
the importance of incorporating culture into any under-
standing of community to fully comprehend coping and
adaptation behaviours in stressful situations (Trickett,
2009). For example, a study conducted in multicultural
societies found that in white majority communities, in-
formal relationships between neighbours were a protective
factor, but this was not the case for minority communities
(Dupere and Perkins, 2007). Furthermore, a different study
found that perceived discrimination by members of a
minority group is related to a heightened awareness of self-
identity in response to the threat of discrimination (Birman,
Trickett and Buchanan, 2005), which, in turn, strengthened
their community.

Thus, the sense of community in schools should be investi-
gated as a potential protective factor when facing the
stressful situation of teaching special education students in
regular classes with no extra teaching assistance.

Job satisfaction
Job satisfaction has important implications for employee
well-being (Kouvelios and Bagiatis, 1997) that derive from
a need to believe one’s actions within the framework of
one’s work are important and significant (Malach-Pines,
2002). One of the definitions of job satisfaction focuses on
the perceptions of fulfilment as a result of day-to-day activi-
ties. This fulfilment is associated with job commitment
and also, therefore, with higher levels of performance at
work (Judge et al., 2001). As in other forms of employment,
in the school setting, job satisfaction is an important
element that influences teachers’ attitudes and performance
(Caprara et al., 2003).

In the education system, many teachers report high levels
of satisfaction from their job while simultaneously reporting
high levels of stress and professional attrition (Chaplain,
2008). Thus, job satisfaction is another factor that could be
linked to teacher well-being when faced with the stressful
situation of having special education children in their class-
rooms with no additional teaching assistance.

Stress reactions
Teaching is a stressful occupation typified by numerous
and often-conflicting demands from administrators, colleagues,
students and parents. Additionally, teachers must contend
with chronic work overload, policies that are constantly
shifting and the realisation that recognition for their accom-
plishments is not guaranteed (Greenglass, Burke and
Moore, 2003). The negative emotions evoked by their work
experiences is defined as teachers’ stress (Kyriacou, 2001),
which may ultimately result in burnout, depression, poor
performance, absenteeism, low levels of job satisfaction
and, eventually, the decision to leave the profession (Betoret, 2006; Jepson and Forrest, 2006).

In addition to the reported general findings on teachers’ stress, it should be noted that compared with individuals who are part of a majority, minorities seem to be more vulnerable to distress (Norris and Alegria, 2005; Wickrama, Noh and Bryant, 2005). Several studies conducted in Israel produced inconsistent results regarding the level of stress in different cultural groups following stressful events. Research efforts in northern Israel on the background of political violence compared Jewish and Arab populations and found similar stress reactions in both groups (Braun-Lewensohn, Sagy and Roth, 2010; Cohen and Eid, 2007). However, other studies reported higher levels of anxiety, anger or distress among Arabs (Braun-Lewensohn and Sagy, 2011; Hobfoll, Canetti-Nissim and Johnson, 2006). But the nature of the stress-provoking situation being investigated in the present research is totally different, and, therefore, it deserves further attention.

The following research questions were formulated according to the study aims:

1. Are there differences between Jewish and Arab teachers in terms of the different research variables – coping resources (SOC and sense of school community), job satisfaction and stress reactions of anxiety and anger?
2. What is the role of different demographics (age, number of years teaching, and phase – lower or elementary school and upper or middle/high school, number of special education children one teaches, level of education), as well as the different coping resources – SOC, sense of school community and job satisfaction – in explaining stress reactions of anxiety and anger among both Jews and Arabs? The direct and indirect role of the coping resources through job satisfaction will be explored. The theoretical model is presented in Figure 1.

Method
Participants
Six hundred and thirty-four teachers participated in this study. Eighty percent of them were Jews. The proportion of Jewish and Arab teachers in this study reflects the proportion of the Jewish and Arab population in Israel. Of the

![Figure 1: The relationships between sense of coherence, sense of school community, job satisfaction and stress reactions: A theoretical model](image)
participants, 71.5% teach in elementary schools, and 28.5% teach in middle/high schools. The sample contained ages in the range of 21–62 \([M = 37.39, \text{standard deviation (SD)} = 9.58]\), 80.7% of which were females. A majority (77.7%) of them reported having graduated from a college of education, and 82% of the teachers hold an academic degree. Teachers reported that the number of special education children in their total regular classes ranged from 1 to 43 \([M = 7.93, \text{SD} = 6.42]\).

To further compare the two groups (Jews and Arabs) constituting the sample, a \(\chi^2\) and a \(t\)-test were run on the different demographic variables (Tables 1 and 2). Significant differences were found between Jews and Arabs on age, number of years teaching, and the number of special education children in their respective classes; Arab teachers were younger and had taught fewer years, but they had more special education children (with no teaching assistance) in their classes. Further exploration showed that Jewish teachers had more years of education.

### Procedure
All the ethical procedures applicable to this study were followed. As required by the Israeli Ministry of Education, the research proposal and questionnaires were sent to the office of the Central Scientist, and the questionnaires were approved before the study began. After fulfilling the requirements set by the Ministry of Education and receiving its approval to proceed with the study, we received permission from the principals to enter the schools. Teachers from 27 schools were approached in person by research assistants to complete self-report questionnaires in their free time during November 2010 to January 2011. Considering cultural sensitivity, the Jewish schools were approached by Jewish research assistants whereas the Arab schools were approached by Arab research assistants. The participants were informed that the researcher was interested in their experience of teaching special education children who get some help in school through a special integration programme but who receive no additional assistance in the regular class. They were also informed that participation was voluntary and anonymous.

### Measures

#### Demographic questionnaire
Teachers were asked to report their gender, age, number of years teaching, number of classes taught and number of special education children in their classes. Additionally, they were asked to report whether they graduated from a college of education or from a university, their level of education (three levels – no academic degree, BA or Bed, MA/MED or PhD), and in which type of school they were teaching – elementary or middle/high school – at the time of the survey.

#### SOC
This was measured using a series of semantic differential items on a seven-point Likert-type scale with anchoring phrases at each end. High scores indicate a strong SOC. An account of the development of the SOC scale and its psychometric properties, showing it to be reliable and reasonably valid, appears in Antonovsky (1987; 1993). In this study, the SOC was measured by the short-form scale consisting of 13 items and was found to be highly correlated to the original long version (Antonovsky, 1993). The scale included items such as ‘doing the things you do every day is’, which were paired with potential answers ranging from (1) ‘a source of pain and boredom’ to (7) ‘a source of deep pleasure and satisfaction’. In the present study, Cronbach’s alpha was 0.85.

#### Sense of Community Index 2 (SCI-2; Chavis, Lee and Acosta, 2008)
The SCI is based on the theory of sense of community presented by McMillan and Chavis (1986), for whom sense of community comprised a perception with four elements: membership, influence, meeting needs and a shared emotional connection. The SCI-2 contains 24 items rated on a four-point Likert scale ranging from (1)

### Table 1: Demographic characteristics of the two groups

<table>
<thead>
<tr>
<th></th>
<th>Jews</th>
<th>SD</th>
<th>Arabs</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>38.90</td>
<td>9.48</td>
<td>30.79</td>
<td>6.25</td>
<td>8.83***</td>
</tr>
<tr>
<td>Teaching experience (in years)</td>
<td>12.32</td>
<td>9.45</td>
<td>7.82</td>
<td>5.62</td>
<td>6.61***</td>
</tr>
<tr>
<td>Number of classes currently teaching</td>
<td>4.01</td>
<td>2.86</td>
<td>4.53</td>
<td>2.94</td>
<td>–1.77</td>
</tr>
<tr>
<td>Number of special education children teaching</td>
<td>7.43</td>
<td>6.28</td>
<td>9.85</td>
<td>6.40</td>
<td>–3.64***</td>
</tr>
</tbody>
</table>

***P < 0.001.

### Table 2: Demographic characteristics: differences between Jewish and Arab teachers

<table>
<thead>
<tr>
<th></th>
<th>Jews</th>
<th>%</th>
<th>Arabs</th>
<th>%</th>
<th>(\chi^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>313</td>
<td>53.3</td>
<td>107</td>
<td>18.2</td>
<td>29.15***</td>
</tr>
<tr>
<td>Middle/high school</td>
<td>158</td>
<td>26.9</td>
<td>9</td>
<td>1.5</td>
<td>0.84</td>
</tr>
<tr>
<td>College of education</td>
<td>349</td>
<td>60.6</td>
<td>97</td>
<td>16.8</td>
<td>5.11*</td>
</tr>
<tr>
<td>University</td>
<td>114</td>
<td>19.8</td>
<td>16</td>
<td>2.8</td>
<td>0.08</td>
</tr>
<tr>
<td>No academic degree</td>
<td>78</td>
<td>13.5</td>
<td>31</td>
<td>5.4</td>
<td>7.41*</td>
</tr>
<tr>
<td>BA</td>
<td>333</td>
<td>57.8</td>
<td>74</td>
<td>12.8</td>
<td>12.35***</td>
</tr>
<tr>
<td>MA or PhD</td>
<td>52</td>
<td>9.0</td>
<td>8</td>
<td>1.4</td>
<td>0.08</td>
</tr>
</tbody>
</table>

*P < 0.05, ***P < 0.001.
not at all to (4) completely. It covers all the attributes of a sense of community described in the original theory. Examples of items include community members and I value the same things; most community members know me; and fitting into this community is important to me. The SCI-2 was checked cross culturally and proved to be a reliable measure (Chavis et al., 2008). The mean score was calculated for the entire index, and Cronbach’s alpha for the present study was 0.95.

Employee Satisfaction Inventory (ESI; Koustelios and Bagiatis, 1997). The employee satisfaction inventory comprises 24 items rated on a five-point Likert scale ranging from (1) strongly agree to (5) strongly disagree. Six subscales emerged – working condition, supervisor, pay, job itself, organisation as a whole and promotion. The global ESI scale is derived from the mean score of all items. The psychometrics of the scale/s proved to be good with adequate reliability (Koustelios and Bagiatis, 1997). Cronbach’s alpha for the global scale in the present study was 0.85.

State anxiety. This was assessed using the Hebrew version of Spielberger, Gorsuch and Lushene’s (1970) state–trait anxiety inventory (STAI). The Hebrew version is a translation of the English STAI. It has proved to be a reliable and valid equivalent to the English inventory (Teichman, 1978). State anxiety scores were evaluated using the mean score of the relevant 11 items from the 20-item inventory of the STAI (on a Likert-type scale ranging from 1 to 4). Examples for items include I feel peaceful, I am afraid of disasters, and I am worried. Cronbach’s alpha was 0.88.

State anger (Spielberger et al., 1970). The Hebrew translation (Teichman, 1978) was used to assess anger. The Hebrew translation has proved to be a reliable and valid equivalent of the English language State Anger Inventory (Teichman, 1978). This scale comprises six items on a four-point Likert scale. Examples of inventory items include I am angry, I want to scream at someone, I feel frustrated and so on. The mean score was used, and Cronbach’s alpha reliability was 0.86.

Results
A comparison between the Jewish and the Arab groups on the main study’s variables was explored using a t-test (Table 3). Significant differences were shown only on two variables. Whereas SOC was higher in the Jewish group, sense of school community was higher in the Arab group.

Preliminary stepwise regression analysis that included demographic variables of age, number of years teaching, level of education, number of special children that one teaches and phase (elementary or middle/high school) revealed that only two variables were significant in explaining stress of anxiety and anger or job satisfaction. Stress: phase: $\beta = 0.22, P = 0.00$; number of special kids: $\beta = -0.09 P = 0.02$; job satisfaction: number of special kids: $\beta = 0.12, P = 0.00$; phase: $\beta = -0.10 P = 0.02$. Thus, it was decided to include only these two variables in the final model.

We used AMOS 5.0 (Arbuckle and Wothke, 1999) with maximum likelihood estimation to test the hypotheses that the different coping resources (SOC and sense of community coherence) predict job satisfaction and stress reactions of anxiety and anger directly and indirectly via job satisfaction. We also examined phase and number of special education children one teaches as potential predictors of job satisfaction and stress reactions. We further explored how one’s level of job satisfaction can be used to predict reactions of anxiety and anger. We used multi-group analyses to compare the effect of the different coping resources and job satisfaction on stress in each group. Each of these variables was used separately as a manifest variable. For stress reactions (the dependent variable), a latent variable was created using the two dimensions of stress reactions (i.e., state anxiety and state anger) as indicators. The final model includes only variables that showed significant prediction at least for one group.

Model fit to the data was assessed using the ratio of chi-square to degrees of freedom ($\chi^2/d.f.$), the incremental fit index (IFI; Bollen, 1989), the comparative fit index (CFI; Bentler, 1990), and the root mean square error of approximation (RMSEA; Browne and Cudeck, 1993). Acceptable fit is indicated by a $\chi^2/d.f.$ ratio as high as five (Marsh and Hocevar, 1985), IFI and CFI values equal to or greater than 0.90, and a RMSEA of less than 0.08 (Browne and Cudeck, 1993; Hoyle, 1995). The indices were adequate for the overall model – $\chi^2(20) = 59.3, P < 0.001$; $\chi^2/d.f. = 2.47$; CFI = 0.97; IFI = 0.97; RMSEA = 0.05 (Figures 2 and 3).

Overall, the coping resources of SOC and sense of school community were linked to job satisfaction and to stress reactions in the same direction in both groups. Job satisfaction was also linked to stress reactions in the same direction. It should be noted that sense of school community was not significant in its relation with stress reactions for both groups, and thus, this link was eliminated in the final model. In addition, the link between phase and job satisfaction as

<table>
<thead>
<tr>
<th>Variable</th>
<th>Jews</th>
<th>Arabs</th>
</tr>
</thead>
<tbody>
<tr>
<td>State anxiety (1–4)</td>
<td>2.11</td>
<td>2.01</td>
</tr>
<tr>
<td>State anger (1–4)</td>
<td>1.71</td>
<td>1.61</td>
</tr>
<tr>
<td>Sense of coherence (1–7)</td>
<td>5.00</td>
<td>4.73</td>
</tr>
<tr>
<td>Sense of school community (1–4)</td>
<td>2.69</td>
<td>2.91</td>
</tr>
<tr>
<td>Job satisfaction (1–5)</td>
<td>3.40</td>
<td>3.32</td>
</tr>
</tbody>
</table>

**P < 0.01.**

Table 3: Differences between Jewish and Arab teachers on the main study’s variables
well as the link between the number of special education children and stress were eliminated from the final model because of insignificant relationships in both groups.

In spite of the similarities, meaningful differences were found. First, the overall variance explained for Jews and Arabs was different for both job satisfaction and stress reactions. Whereas for job satisfaction, the explained variance was higher for Jews (47% Jews; 23% Arabs), for stress reactions, the explained variance was higher for Arabs (51% Arabs; 42% Jews). Furthermore, comparisons of the effects of the different coping resources and the number of special education children one teaches on job satisfaction were examined by comparison of a nested model. Additionally, the different coping resources, job satisfaction and phase were examined as explanatory of stress in the two groups. Thus, equality constraints among groups were assigned for each effect, thereby allowing comparison of the constrained model fit to the free model fit. Statistical differences were found for the variables as follows: SOC and job satisfaction \( (\chi^2(26) = 316.4; \Delta \chi^2(2) = 257.1; P = 0) \); number of special education children and job satisfaction \( (\chi^2(26) = 3212.4; \Delta \chi^2(2) = 3153.1; P = 0) \); SOC and stress reactions \( (\chi^2(26) = 1206.3; \Delta \chi^2(2) = 1147; P = 0) \); job satisfaction and stress reactions \( (\chi^2(26) = 730.7; \Delta \chi^2(2) = 671.4; P = 0) \); and phase \( (\chi^2(26) = 385.1; \Delta \chi^2(2) = 325.8; P = 0) \).

Although SOC (0.31) and sense of school community (0.56) were moderately and strongly linked, respectively, to job satisfaction among the Jewish teachers, they were weakly (0.14) and moderately (0.24) linked, respectively, to job satisfaction in the Arab group. Additionally, the number of special children one teaches was moderately and positively related to job satisfaction in the Arab group; however, in the Jewish group, it was negatively, weakly and non-significant in its link to job satisfaction. Further differences were found in the way SOC and job satisfaction predicted stress reactions. While SOC was stronger for the Arab group \((0.64 \text{ Arabs}; -0.47 \text{ Jews})\), job satisfaction was stronger for the Jewish group \((-0.27 \text{ Jews}; -0.20 \text{ Arabs})\).
was a significant but relatively weak predictor for Jews but not for Arabs. Elementary school teachers in the Jewish system are better protected from stress in this context of special education children compared with their middle/high school counterparts.

Our investigation of indirect effects showed weak mediated effect for SOC with −0.08 for the Jewish group and −0.0 for the Arab group. As for sense of school community, the indirect mediated effect was −0.15 for the Jewish group and −0.05 for the Arab group. Finally, the indirect mediating effect for number of special education children on stress reaction was 0.01 for the Jewish group and −0.07 for the Arab group.

**Discussion**

The aim of this study was to examine stress reactions (state anxiety and state anger), job satisfaction and coping resources (SOC and sense of school community) among Jewish and Arab teachers whose classes also include special education students but with no additional teaching assistance. We investigated the issue of which coping resources help explain job satisfaction and stress reactions and how job satisfaction can explain the level of stress in each group.

Our first question explored how the two groups differed across the variables. We found low levels of anger and moderate levels of anxiety in both groups. We surmised that Jewish and Arab teachers, who are already used to having different kinds of special education children in their classrooms without extra teaching assistance, do not perceive this situation as excessively stressful. Moreover, similar stressors may elicit similar reactions in the two cultural groups. These findings replicate those of other studies in which similar stressors, such as the Second Lebanon War, led to similar levels of stress reactions (Braun-Lewensohn et al., 2010).

Furthermore, no differences were found among the Jewish and Arab teachers in terms of job satisfaction. Although the two groups belong to the ministry of education, the working
conditions in the Arab education systems in southern Israel are known to be markedly worse than those in the Jewish education system (Abu Saad, 2004). Similarly to the proportion in the entire Israeli population also in this study, we found that Arab teachers taught greater numbers (than their Jewish colleagues) of special education children with no teaching assistance in their classes. Thus, given the extremely poor infrastructure and challenging environment for Arab teachers, the relatively high satisfaction from their job is encouraging. These findings perhaps indicate that the Arab teachers, who are used to lower quality facilities and services in their communities (Abu Saad, 2003) and in other domains in their lives, do not vent their frustration via the specific dimension of job satisfaction. Rather, aware of the relatively high unemployment rates in their sector, Arab teachers may feel lucky to have jobs with respectable salaries. Moreover, teaching is a highly respected job in the Arab community and culture in Israel, which could also contribute to satisfaction with one’s job. Additionally, a previous study among Arab teachers in Israel found that they value the importance of their contribution to community and society (Abu Saad, 2003), a value that may be reflected in the present study.

However, differences were revealed between the two groups in terms of the two coping resources. Whereas Jewish teachers reported higher levels of SOC, Arab teachers reported higher levels of school community. The findings are not surprising and can be explained in terms of each cultural group. According to Antonovsky (1979; 1987), good family conditions and home care are general resistance resources (GRRs), providing sets of positive life experiences that reinforce feelings of consistency, of equal participation in shaping outcomes, and of their being a balance between under load and overload. These experiences play a major role in enhancing a strong SOC. A factor that was found to significantly influence the development of SOC is socioeconomic status (SES). In our study, SES was measured by the teachers’ levels of education. Significant differences were revealed between Arab and Jewish teachers with a trend towards higher education among Jews. These differences in SES may also lead to differences in the level of SOC. Furthermore, our sample of teachers belongs at least in part to Bedouin-Arab society, the narrative of which expresses instability and inconsistency, values that contradict the basic rationale of SOC, especially as it relates to the comprehensibility component of the concept. The basics of comprehensibility rest on logical consistency and stability. But Bedouin society has undergone numerous transformations, some ongoing, that have become integral parts of their lives (Abu Saad, 2004). Living in a society in transition, these teachers may have been unable to maintain high SOC because of the contradictory demands entailed in responding to complex intensive changes (Antonovsky, 1987). Moreover, previous studies have shown that minority groups tend to have lower SOC compared with majority groups (Braun-Lewensohn and Sagy, 2011; Glanz et al., 2005).

The other resource, school community, was higher among Arab teachers, a finding that can be explained based on the groups’ respective cultural backgrounds. As a collectivist society, the Arab teachers in this study ascribed greater value to their collective (Earley, Gibson and Chen, 1999), that is, their school community, and, therefore, they reported higher levels of sense of school community.

Second, we examined the role of different demographics in explaining job satisfaction or stress reactions. The only significant variables were phase and number of special education children one teaches. In the final model, we found that the number of special education children explained job satisfaction in the Arab group only. Surprisingly, those teachers who had more children reported higher satisfaction. This result is in line with an Islamic frame of reference that argues enhancement of social equality and welfare (Ashencaen Crabtree, Husain and Spalek, 2008); in this study, it is reflected by teaching special education children. Phase, on the other hand, explained significant stress reactions for Jewish teachers only. Meaning that teachers who work in middle/high schools are more vulnerable to stress on the background of teaching special education children. This could be explained by the training that each group of teachers receives. Whereas regular teachers in elementary school get training that includes tools for working with special education children, training of middle/high school teacher is usually shorter and does not cover this dimension. Therefore, middle/high school teachers are less skilled in handling different kinds of students such as those who have learning disabilities. Furthermore, middle/high school teachers conceptualise their profession as more directed to the subject area that they teach, whereas those who teach elementary years view themselves as holistic educators. This conceptualisation helps elementary school teachers to better handle difficulties in working with a variety of students.

The main question of this study, however, related to the role of the two coping resources of SOC and sense of school community in explaining job satisfaction and stress reactions, and the role of job satisfaction in explaining stress reactions in the two cultural groups in light of having special education children introduced into regular classes with no additional teaching assistance. In both cultural groups, sense of community explained job satisfaction. It seems that when feelings of being part of a community in which personal needs are met, the individual has some influence, and he/she can share cross culturally an emotional connection with people, this reinforces one’s job satisfaction.

In contrast to the findings for sense of community, SOC level was significant in explaining job satisfaction only among the Jewish group. Again, it seems that the role of SOC in Arab culture is less unequivocal. For example, in a different study, during the highly stressful ‘Operation Cast Lead’, it seems that SOC did not contribute to better
well-being (Braun-Lewensohn and Sagy, 2011). Furthermore, Eriksson & Lindström (2006) claimed in their review that the role of SOC and its contribution to health are not always clear among employees, and they therefore called for further research. This conclusion is compatible with the present study, indicating that indeed, more in-depth research is needed.

The picture becomes significantly more complex when looking at the entire model. Although SOC did not contribute to job satisfaction in Arab culture, it was the strongest contributor to stress, and it was even stronger than in the Jewish culture. It should be noted that in spite of the lower Arab SOC compared with that of the Jews, it was nevertheless relatively high (on the higher end of the scale). Thus, perhaps not only culture is playing a role in the way SOC contributes to stress but also the fact that SOC was relatively high relates to these relationships. As Eriksson and Lindström (2005) claim, the role of lower SOC is less understandable than the effect of higher SOC.

Job satisfaction also contributed in both cultures to better well-being and lower levels of stress reactions. It seems that when people are confronted with a stressful situation, such as having a special education child in their classroom, but are satisfied with their job, then they do not perceive this situation as an especially stressful one. As a result, they do not report high levels of anxiety or anger.

**Study limitations**

A proper assessment of the research and practical implications of this study requires acknowledging certain limitations and drawing conclusions that can be translated into future avenues for research. First, because all the data are self-reports, the extent to which teachers’ experiences of stress and difficulties converge with external observations remains to be investigated. Although self-reports are generally reliable, an assessment may benefit from multiple-informant evaluations. As a rule, the multi-informant paradigm facilitates a better evaluation of the psychological difficulties across different environments (Celestin and Celestin-Westreich, 2008; Koplewicz et al., 2002).

Second, in the absence of a base rate for participant mental health indicators prior to the study period, we cannot state with certainty whether the observed outcomes are due solely to the impact of teaching special education children in a regular classroom with no additional teaching assistance. This finding suggests that longitudinal designs better suited to evaluating cause–effect relations must be developed.

Finally, a certain amount of sample bias cannot be ruled out and has probably affected the results. We investigated a relatively large sample representing different segments of the population of Israeli teachers in terms of education, type of schools, age range and the number of special education children they teach. A generalisation of the findings nonetheless calls for caution in light of additional sociodemographic descriptors, such as religious observance and location in Israel, not investigated here. These characteristics deserve more attention in the future.

Taken together, longitudinal designs along with closer investigations of cognitive and emotional regulation dynamics and how these interact with coping responses are likely to contribute not only to the research base but also to fine-tuning future prevention efforts and intervention programmes to the needs of teachers confronted with the increased numbers of special education children arriving in their classrooms with no additional teaching assistance.

**Conclusion**

Our study is a first attempt to compare Jewish and Arab teachers who teach special education children in their classes with no additional teaching assistance on several dimensions of coping and stress. It confirmed that similar stressful situations are linked to similar levels of stress reactions such as anger and anxiety as well as similar levels of job satisfaction. However, this research also supports the notion that different cultural groups have different coping resources that, in turn, have different strengths and make correspondingly different contributions to a person’s well-being in each culture. It seems that sense of community and SOC are important in the school environment and contribute to job satisfaction, especially in the Jewish culture. In both cultures, SOC is a meaningful variable as the protector of stress reactions in light of the introduction of special education children into classes with no additional teaching assistance.

Future research should seek to identify more precise coping strategies that may be operating in the relationships between the different coping resources, job satisfaction and stress reactions.

**Address for correspondence**

Orna Braun-Lewensohn,
Conflict Management and Conflict Resolution Program,
Department of Interdisciplinary Studies,
Ben Gurion University, Negev
POB 653,
Beer Sheva, Israel.
Email: ornabl@bgu.ac.il

**References**

Beer-Sheva: BGU Print. (Hebrew).


