Psychological Traits Of Mixed-Ethnic Arab-European Adolescents In Israel

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Citation

Abstract
This study compared the psychological characteristics of 127 mixed-ethnic Arab-European adolescents and 196 mono-ethnic Arabs aged between 12 and 18 years who resided in Israel. Findings revealed significant differences in favor of the mono-ethnic participants in areas of self-esteem, quality of life, environmental mastery, and positive relations with others. In a similar pattern where higher scores are indicative of worse adjustment, mixed-ethnic adolescents, had significantly higher scores than their mono-ethnic counterparts on psycho-physiological symptoms, anxiety, and depression. In terms of Arab ethnic identification, differences between mixed- and mono-ethnic participants were found to be non-significant. At the ego identity level, the study's mixed-ethnic adolescents were significantly more often identified as 'diffused' subjects, and significantly less often identified as having attained an 'achieved' ego identity in comparison to their mono-ethnic Arab peers.

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INTRODUCTION

The Arab minority in Israel, often viewed an indigenous ethnic group (1, 2), has seen over the past decades an increase in the size of a sub-population of mixed-ethnic Arab-European families living in its midst. All the European wives in these marriages were born in different Western or Eastern European countries and immigrated to Israel with their Israeli Arab husbands after their husbands finished studying in Europe.

Mixed-ethnic unions among Israeli Arabs tend to be seen as representing a deviation away from ethnic harmony and identity; similarly to judgments formed of mixed marriages in other contexts (3). Such marriages are typically believed to involve the risk of both social maladaptation and personal deformation (4). Relatedly, evidence suggests that the offspring of mixed-ethnic marriages, together with those marriages themselves, are immediately subject to the suspicion and disapproval of the ethnic group/s in which they live, as well as that of both partners; they are regarded as a problem both for the couple and for the rest of society (4, 5, 6).

The decline in the influence of traditional communal values and forms of family organization, as undergone by the Arab minority in Israel, and the increased influence of Western ideas and family structures, as well as new forms of personal mobility and modernity (7, 8, 9, 10) offer different explanations as to why some Israeli Arabs may have taken European marriage partners.

An emphasis on the collectivity of the Arab group and on the continuity of its ethnic and cultural structure (1, 8, 11), given the pervasiveness of these values in the Arab community, may explain Arabs' strong rejection of and tendency to marginalize mixed-ethnic unions and their issue. At least three main factors can help explain Israeli Arabs' emphasis on collectivism and solidarity. First, the history of ethnic tension between Arabs and Jews, in the course of which the so-called 'historical collective-self' of Arabs in Israel has come ever more sharply into focus in the wake of certain crisis-points or watershed moments in the country's treatment of its minority (12, 13, 14). Second, the Arab perception of systematic deprivation occurring among Arabs in Israel, which encourages them to construct and experience a sense of their own identity of conflict with the state. Third, the Arab perception of the perpetuation of Arabs' disadvantage in Israel through legal and political forms of discrimination (2, 15, 16). Indicators in a range of fields — wealth, health, population and educational attainment — suggest disparities between Arabs and Israelis (17).
In this context, children born to European mothers and Arab fathers, perceived as they are as a threat to the continuity of the Arab group's ethnic structure, are likely to encounter a higher than usual degree of rejection and exclusion, and may experience discrimination and prejudice to greater degrees than other individuals in Arab society. It is commonly hypothesized that such experiences are liable to interrupt their psychological adjustment (18, 19, 20, 21, 22). Also, these children are a product of two culturally distant ethnicities, meaning that their socialization to their immediate familial, social, and cultural contexts might furthermore be expected to be inconsistent or confusing, exacerbating any psychological maladjustment (23, 24, 25, 26). Mixed-ethnic Arab-European children's psychological maladjustment could be exacerbated further as a consequence of the greater difficulties of affiliation such children face in constructing identities. Children have to deal with the possible rejection of their absorption into their Arab heritage on account of failing to meet its criteria for membership as judged by other Arabs. Relatedly, they may have to deal with discrimination against their European heritage as expressed by exclusively mono-ethnic identified Arabs, whose potential dislike in this direction underlines the salience of ethnicity for this group and is formed in reaction to actual or perceived injustice suffered by Arabs in the Israeli socio-political context. Mixed-heritage individuals, thus, are thought to undergo a more complicated process in establishing their personal or ethnic identities, with there being a tendency for them to fall prone to identity diffusion or confusion (20, 27, 28, 29, 30).

Findings relating to the effect of 'social rejection and exclusion' and 'inconsistent socialization' on the psychological adjustment of non-clinical samples of mixed-ethnic children, while obtained in a less ethnically embattled context than the Israeli, nevertheless point to low levels of self-esteem and environmental mastery, poor experienced quality of life, and less positive relations with others among mixed-ethnic children as compared to their mono-ethnic peers (31, 32, 33, 34). Studies also report that mixed-ethnic children experienced psychological difficulties across multiple domains of functioning; individuals manifest relatively higher degrees of psycho-physiological symptoms and feelings of anxiety and depression (26, 35, 36). Findings derived from research on the influence of mixed-ethnic unions in North American or European contexts have described biracial or mixed-ethnic individuals as experiencing a unique degree of ambivalence over their personal, racial, or ethnic identity (30, 33, 37, 38).

On the basis of the three broad cited lines of literature referring to 'social rejection and exclusion', 'inconsistent socialization', and problems of 'identity formation', and taking into account the presence of ethnic tension in Israel, this study hypothesized that: (1) mixed-ethnic Arab-European children in Israel show low degrees of self-esteem, quality of life, environmental mastery, and positive relations with others, compared to their counterpart Arab mono-ethnic peers; (2) Arab-European children manifest higher levels of psycho-physiological symptoms and feelings of anxiety and depression in comparison to their Arab peers; (3) Arab-European children in Israel show higher levels of confusion in their formation of an ethnic or personal identity as compared to their Arab counterparts.

**METHOD**

**PARTICIPANTS**

As summarized in Table 1, a total sample of 323 participants: 127 mixed-ethnic adolescents and 196 mono-ethnic Arab adolescents participated in this study. All of the mono-ethnic adolescents and 92.9% of the mixed-ethnic adolescents were born in Israel; the remainder of the mixed cohort were born in their mothers' country, but had lived in Israel from early childhood. The average age of the mixed-ethnic sample was 15.63 with a range of 13 to 18, while in the mono-ethnic sample the average age was 15.68 with a range of 12 to 18. The two samples did not differ in their global school performance, as measured by their average year score. As indicated by their self-report of the socioeconomic level of their families, all of the mixed-ethnic adolescents and the majority of their counterparts belonged to the middle and upper middle classes.
PROCEDURE

The mixed-ethnic participants were recruited via telephone from a list of 157 mixed-ethnic adolescents (above the age of 13), which was prepared in two main ways: first, assistance was sought from local authorities such as councils and welfare offices; second, according to the so-called method of snowball-sampling, 'family introduced family' and 'adolescent introduced adolescent' to the survey. Request for participation of mono-ethnic adolescents was advertised in relevant high schools (of age ranges from 12- to 18-years old). Those who agreed to participate were contacted via telephone and provided with further information about the study. Approval for adolescents to participate was sought from both adolescents and their parents, leading to informed consent agreements being collected at the time of delivering the study questionnaires. Adolescents were further assured that any information provided would be treated confidentially.

Mixed-ethnic participants met with the principal investigator in their homes. They could not be met in groups because they often live in different geographic locations. The mono-ethnic adolescents, however, met with the principal investigator in groups at school with groups defined by either neighborhood or school-year. In all cases, participants completed the questionnaires described below.

All respondents answered the Arabic version of the measures. The study employed translation and back translation (\(\Rightarrow\)) to assure a precise match between the Arab and English versions of the scales. This was an important step because the measures used were not previously tested with Arab adolescents or those of Arab-European origin in Israel. In addition, a pilot study was conducted to assure the clarity of the translated versions. These interviews with 10 mixed-ethnic participants (5 males and 5 females) and 10 mono-ethnic Arabs (5 males and 5 females) yielded clearer alternative wordings for items found problematic by adolescents.

As a modest compensation for his or her input and time each participant was given a music CD. This research was approved by the Psychology Ethics Committee of Cambridge University.

MEASURES

Participants filled out questionnaire measures. Mean scores for each measure, after reversing negative items, were used in the analyses, with a high score indicating a higher degree of the characteristic recorded by the measure.

Self-esteem. Self-esteem was measured by Rosenberg's (\(\Rightarrow\)) 10-item scale. Participants responded to a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The measure is reported to be valid and reliable (\(\Rightarrow\)). Chronbach's alpha reliabilities were 0.82 and 0.80 for mixed-ethnic and mono-ethnic individuals, respectively.

Quality of life. The study adopted Andrews and Withey's (\(\Rightarrow\)) 17-item quality-of-life scale. The scale uses a 7-point response format ranging from 1 = terrible to 7 = delighted. The measure has demonstrated good validity and reliability (\(\Rightarrow\)). Chronbach's alpha reliabilities were 0.86 and 0.88 among the mixed-ethnic and mono-ethnic individuals, respectively.

Environmental mastery. Ryff's (\(\Rightarrow\)) environmental mastery 9-item scale was used. The scale measures a person's sense of mastery and competence in managing the surrounding environment, including the ability to control a complex array of external activities, to make effective use of surrounding opportunities, and to choose or create contexts in which personal needs and values may be pursued and sustained. Participants responded by using a 6-point Likert scale ranging from 1 = strongly disagree to 6 = strongly agree. Ryff (\(\Rightarrow\)) reports reasonable validity and reliability for the measure. Chronbach's alpha reliabilities were 0.92 and 0.78 with the mixed-ethnic and mono-ethnic individuals, respectively.
Positive relations with others. Ryff’s (42, 43) positive relations with others 9-item scale denotes the presence of warm, satisfying, trusting relationships with others, concern for others’ welfare, a strong capacity for empathy, affection, and intimacy, and understanding the nature of give and take of human relationships. Respondents in the present study answered questions by using a 6-point Likert scale ranging from 1 = strongly disagree to 6 = strongly agree. This scale is reported to be valid and reliable (42, 43). Chronbach’s alpha reliabilities were 0.94 and 0.83 for the mixed-ethnic and mono-ethnic individuals, respectively.

Psycho-physiological symptoms. The study used Langner’s (44) psycho-physiological scale, which measures the presence of symptoms in such areas as sleeping and headaches. This 22-item scale has a 5-point response format ranging from 1 = never to 5 = very frequently. Langner’s (44) scale is reported to be valid and reliable. Chronbach’s alpha reliabilities were 0.93 and 0.94 for the mixed-ethnic and mono-ethnic individuals, respectively.

Anxiety. Anxiety was measured using the Spielberger Trait Anxiety Inventory for Children (45). This ‘How I feel Questionnaire’ is a 20-item scale in which participants indicate how often they have experienced a variety of symptoms of anxiety. Item scores in this scale range from 1 = hardly ever to 3 = often. Spielberger (45) provides strong evidence of validity and reliability for this scale. Chronbach’s alpha reliabilities were 0.79 and 0.70 for the mixed-ethnic and mono-ethnic individuals, respectively.

Depression. The study used the 27-item self-report Children’s Depression Inventory by Kovacs (46). Items were scored on a 3-point Likert scale from 0 to 2, indicating the absence of depression, moderate depression, or severe depression. This scale has strong validity and reliability (46). Chronbach’s alpha reliabilities were 0.83 and 0.86 for the mixed-ethnic individuals and mono-ethnic individuals, respectively.

Ethnic Identity. The study measured the Arab ethnic identity of the participants using a modified version of Phinney’s Multi-group Ethnic Identity Measure (47), which claims a universal applicability across different ethnic groups on the basis of its focus on supposedly common features in the components making up people’s ethnic identity. The measure used consists of 14 items measuring the Arab ethnic background; here, two items assessed ethnic behaviors, five items measured ethnic affirmation and belonging, and seven items assessed ethnic identity achievement. All items were rated on a 4-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree. Phinney (47) provides evidence of validity and reliability of the measure. Chronbach’s alpha reliabilities of the modified Arab ethnic identity scale and subscales in the present study were reasonable, ranging from 0.75 to 0.88.

Personal/ego identity. Ego identity was measured using the EOM-EIS measure devised by Bennion and Adams (48). This measure consists of 64 items assessing defined ego identity statuses (Diffusion, Foreclosure, Moratorium, and Achievement). The four ego identity statuses are generated from an interaction between reported processes of respondents exploring and committing to themes in personal domains referring mainly to profession, politics, religion, beliefs about life, friendship, dating, sex-roles, and hobbies. The term diffusion refers to lack of exploration and commitment to stated themes; foreclosure is characterized by a commitment based on little or no exploration of alternatives; moratorium refers to individuals’ current exploration of options without their having committed themselves to choices; and identity achievement is taken to mean a commitment to choices based on the exploration of alternatives. In EOM-EIS, each of the eight ego identity domains is measured by eight items - two items for each status. The participants responded to a 6-point Likert scale ranging from 1 = strongly disagree to 6 = strongly agree. Chronbach’s alpha reliabilities were 0.87 and 0.86 for the mixed-ethnic and mono-ethnic individuals, respectively.

RESULTS
A preliminary analysis showed that age and socio-economic status of participants were statistically non-significantly related to the rest of the variables examined. Based on this analysis, such demographic variables were not controlled for in further analyses, which composed of two sets of analyses.
The first comprised a Multivariate Analysis (MANOVA) in which respondents’ type of ethnic origin (mixed- or mono-ethnic) and gender (male or female) were the independent factors, with self-esteem, quality of life, environmental mastery, positive relations with others, psycho-physiological symptoms, anxiety, depression, and Arab ethnic identity (ethnic behaviors, ethnic affirmation and belonging, and ethnic identity achievement) as the dependent variables. In the second set of analysis, 2 (type of ethnic origin) \( \times \) 2 (gender) \( \times \) 4 (ego statuses) contingency tables and chi-square tests were used to examine differences between mixed- and mono-ethnic participants in the Ego Statuses (Achievement, Moratorium, Foreclosure, and Diffusion).

**MANOVA ANALYSIS**

The interaction between ethnic origin (mixed- or mono-ethnic) and gender was statistically non-significant with respect to adjustment scores, as were differences by gender for the total sample or within each group (mixed- or mono-ethnic). The only statistically significant differences in scores for the dependent variables related to differences in type of ethnic origin between mixed- and mono-ethnic participants (\( F(10,310) = 12.02, \text{Wilks' } \lambda = 0.72, p = 0.001 \)). Post-hoc ANOVA analyses revealed significant differences between mixed- and mono-ethnic individuals for self-esteem (\( F(1,319) = 10.61, p = 0.001 \)), quality of life (\( F(1,319) = 7.60, p = 0.006 \)), environmental mastery (\( F(1,319) = 12.81, p = 0.001 \)), and positive relations with others (\( F(1,319) = 8.76, p = 0.003 \)). In all these instances, the mono-ethnic group scored higher (see Table 2). Mixed-ethnic adolescents, however, achieved significantly higher scores than their counterparts on the psycho-physiological symptoms scale (\( F(1,319) = 9.40, p = 0.002 \)), the anxiety scale (\( F(1,319) = 8.26, p = 0.004 \)), and the depression scale (\( F(1,319) = 14.53, p = 0.001 \)). Non-significant differences between mixed- and mono-ethnic participants were found for Arab ethnic identity achievement and Arab ethnic affirmation and belonging; however, mixed-ethnic adolescents scored significantly higher on the Arab ethnic behaviors subscale (\( F(1,319) = 17.37, p = 0.001 \)).

**Figure 2**

Table 2: Differences between mixed- and mono-ethnic adolescents by psychological characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mixed-ethnic Mean</th>
<th>SD</th>
<th>Mono-ethnic Mean</th>
<th>SD</th>
<th>( F(1,319) )</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem</td>
<td>4.36</td>
<td>0.74</td>
<td>4.71</td>
<td>0.58</td>
<td>10.61</td>
<td>0.001</td>
</tr>
<tr>
<td>Quality of life</td>
<td>4.87</td>
<td>1.30</td>
<td>5.40</td>
<td>1.32</td>
<td>7.60</td>
<td>0.006</td>
</tr>
<tr>
<td>Environmental mastery</td>
<td>4.21</td>
<td>1.26</td>
<td>4.80</td>
<td>1.15</td>
<td>12.81</td>
<td>0.001</td>
</tr>
<tr>
<td>Positive relations</td>
<td>4.39</td>
<td>0.88</td>
<td>4.66</td>
<td>0.72</td>
<td>8.76</td>
<td>0.003</td>
</tr>
<tr>
<td>Psycho-physiological symptoms</td>
<td>4.27</td>
<td>0.92</td>
<td>3.80</td>
<td>1.15</td>
<td>9.40</td>
<td>0.002</td>
</tr>
<tr>
<td>Anxiety</td>
<td>2.34</td>
<td>0.59</td>
<td>2.08</td>
<td>0.73</td>
<td>8.26</td>
<td>0.004</td>
</tr>
<tr>
<td>Depression</td>
<td>1.56</td>
<td>0.48</td>
<td>1.41</td>
<td>0.52</td>
<td>14.93</td>
<td>0.001</td>
</tr>
<tr>
<td>Ethnic behaviors</td>
<td>3.13</td>
<td>0.78</td>
<td>2.79</td>
<td>0.74</td>
<td>17.31</td>
<td>0.001</td>
</tr>
<tr>
<td>Ethnic affirmation and belonging</td>
<td>3.16</td>
<td>0.69</td>
<td>3.24</td>
<td>0.78</td>
<td>0.86</td>
<td>ns</td>
</tr>
<tr>
<td>Ethnic identity achievement</td>
<td>2.98</td>
<td>0.61</td>
<td>2.90</td>
<td>0.48</td>
<td>2.26</td>
<td>ns</td>
</tr>
</tbody>
</table>

Note: ns = non-significant, SD = standard deviation.

**CONTINGENCY TABLES**

Calculations based on Pearson chi-square tests revealed a non-significant relationship between gender and the distribution of ego identity statuses within each of the groups. The relationship between Type of Ethnic Origin - mono or mixed - and Ego Statuses for the overall sample was statistically significant (\( \chi^2 (df = 4) = 52.70, p = 0.001 \)). The contingency link, measured by Cramer’s V, between the two variables was moderate and significant (Cramer’s V = 0.41, \( p = 0.001 \)). This relationship seemed to result from the statistically significant difference between frequencies of Ego Achievement and Diffusion Statuses yielded by the two groups. As Table 3 shows, 31% of the mixed-ethnic participants were classified as having attained an Ego Achievement Status, while 68% of their counterpart mono-ethnic adolescents were placed in this category. By contrast, 31% of the mixed-ethnic participants were placed in the Ego Diffusion Status, while only 8% of the mono-ethnic participants were so classified. Mixed- and mono-ethnic adolescents showed statistically non-significant differences regarding the frequencies according to which they were classified into the other two Ego Statuses, Foreclosure or Moratorium. Comparisons within gender between the mixed- and mono-ethnic groups did not markedly change this pattern of results.
Figure 3
Table 3: Cross-tabulation of ethnic origin and ego identity statuses

<table>
<thead>
<tr>
<th>Ethnic origin</th>
<th>Achievement Percentage</th>
<th>Moratorium Percentage</th>
<th>Foreclosure Percentage</th>
<th>Diffusion Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed-ethnic</td>
<td>31%</td>
<td>20%</td>
<td>15%</td>
<td>31%</td>
</tr>
<tr>
<td>Standardized Residual</td>
<td>-3.40*</td>
<td>1.00</td>
<td>1.50</td>
<td>3.90*</td>
</tr>
<tr>
<td>Mono-Ethnic</td>
<td>65%</td>
<td>16%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Standardized Residual</td>
<td>2.80*</td>
<td>-0.80</td>
<td>-1.20</td>
<td>-3.20*</td>
</tr>
</tbody>
</table>

* Statistically significant difference between the two groups in the frequency of Ego Identity Status (p < 0.05).

DISCUSSION

Consistent with previous research indicating relatively less positive psychological attributes for mixed-marriages’ offspring (25, 32, 33, 34, 49), this study suggests that Arab-European mixed-marriages in Israel incur potentially unpleasant implications for their children. Although the study did not directly investigate the actual experiences of ‘social rejection and exclusion’, ‘inconsistent socialization’, and processes disturbing ‘identity formation’ which its mixed-ethnic Arab-European participants were hypothesized as facing, it did examine a number of variables attributed to these processes. Study findings supported the first hypothesis, of mixed-ethnic children having greater psychosocial difficulties of adjustment than mono-ethnic Arab children with regard to self-esteem, quality of life, mastery of their environments, and the capacity to form positive relations with others. Similarly, study evidence confirmed the second hypothesis, that mixed-ethnic children face emotional difficulties, as there were greater levels of psycho-physiological symptoms and symptoms of anxiety and depression among this group in comparison to their Arab peers. These results remain true in the case of females and males for cross-compared mixed- and mono-ethnic groups. Differences between mixed- and mono-ethnic children may not be surprising in view of the potentially ‘doubled’ experiences of prejudice, discrimination, and constant ethnic stress to which mixed-ethnic adolescents are potentially subjected, by both the Israeli state and the Arab community.

More surprisingly, however, the study also found that mixed-ethnic children showed a non-significant difference from their Arab counterparts in their sense of Arab ethnic identification, thereby disproving half of the third hypothesis. Specifically and without notable gender differences, mixed- and mono-ethnic adolescents revealed quantitatively equal degrees of affirmation, belonging, and attachment to the Arab group, as well as interest in, awareness of, and sense of clarity concerning their Arab ethnicity. Mixed-ethnic adolescents indeed recorded Arab ethnic behaviors, such as involvement in Arab ethnic traditions, to a greater degree than did mono-ethnic Arab adolescents. One explanation of this finding could be that the family setting in which these children were nurtured fostered an Arab sense of ethnic belonging. Another approach could be that mixed-ethnic adolescents felt an internal or externally imposed need to assert their Arab affiliation in the context of their immediate Arab minority communities. Whatever the explanation, these individuals as a group did not appear to have lesser self-experienced outcomes of adjustment difficulties as described above.

Findings of the present study at the personal (ego) identity level confirmed the remaining component of the third hypothesis, that mixed-ethnic offspring are disadvantaged in attempting to form a strong sense of personal identity. The study supported the tendency of classification of mixed-ethnic adolescents with the Ego Identity Diffusion Status and mono-ethnic adolescents with Achievement Status. Mixed- and mono-ethnic individuals showed non-significant differences on the other two Ego Statuses, the Foreclosure or Moratorium. These results provided support for previous accounts, postulating the susceptibility of mixed-ethnic offspring to difficulties in the processes of forming personal identity (30, 31, 38, 49, 50). Evidence from this study supported the idea that mixed-marriages between European females and Arab males in Israel appear to be correlated with problems in the formation of ego identity among their adolescent offspring, as compared to the association of the background of merely mono-ethnic Arab adolescents. This conclusion held true for mixed-ethnic males and females insofar as such individuals were more often identified as ‘diffused’ subjects at the ego identity level, and significantly less often identified as having attained an ‘achieved’ ego identity. This conclusion, coupled with the finding of a non-significant difference between mixed- and mono-ethnic individuals vis-à-vis Arab ethnic identification, implies that ethnic resolution does not necessarily in itself confer the achievement of a personal identity. There are personal standards that seem to be formed separately from ethnic crystallization in individuals’ self-concept.

CONCLUSIONS

This study’s findings are consonant with the supposition of less positive psychological outcomes associated with mixed-marriages’ offspring. Nevertheless, it is important to note the
study's methodological limitations. First, the principal investigator and the research measures embodied an Arab language and not European language background, which may have affected participants' responses. Second, the study compared Arab-European adolescents and Arab adolescents from Muslim religious backgrounds, meaning that comparisons might not yield a complete picture of the psychological characteristics of the former, which could be from either Christian or Muslim background. Future research comparing those adolescents with Arab Christians in Israel or European Christians is therefore recommended. Even if these limitations did not affect the study's results it should be understood that representing the experience of mixed-ethnic adolescents as in some ways 'less positive' by no means implies pathologizing such individuals. Additionally, this study's attention to the Israeli case does not mean that Arab-European children constitute a uniform group. Within this group there are differences in psychological characteristics that the study did not focus upon. Specifically, the study did not identify how potential support variables such as parents, teachers, and social-networks might promote positive psychological development of these youth and differentiate between those with positive or less positive personality characteristics. Relatedly, the study did not investigate how these individuals align themselves with their European heritages and how Arab/European ethnic identity interaction links to parameters of personality characteristics. The proposed examination would explore the nuances of within the mixed-ethnic group psychological differences, a matter which tends to be obscured in comparisons between mixed- and mono-ethnic individuals. Future research is needed to explore these areas in detail. In light of this study's findings, parents of mixed-ethnic Arab-European adolescents in Israel, or those charged with their psychological welfare, would be recommended to encourage them to achieve a better level of psycho-social and emotional well-being. This can take, for instance, the form of involving them in social interactions with other mixed-ethnic individuals or communities in Israel, in an attempt to mitigate negative feelings aroused by any ethnic friction experienced by the Arab population in Israel. This study would also recommend that mixed-ethnic children undertake the process of exploring and beginning to commit to their personal/ethnic values, aspirations, and beliefs, in the hope that this will also foster a positive sense of well-being.

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