

# Examining the Cultural Context of Youth Mentoring: A Systematic Review

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**Abstract** While research in youth mentoring is extensive in the U.S., little research has explored its effectiveness in New Zealand, despite its growth in the past 20 years. While arguments have been raised that overseas models may not fit all cultural contexts within New Zealand, there appears to be limited evidence supporting this contention. Further, little is known about associations between effectiveness and the cultural appropriateness of programs and research. This systematic review of youth mentoring programs in New Zealand is based on 26 studies that met inclusion criteria. Of those, 14 had a significant proportion (15% or more) of indigenous Māori youth and six had a significant proportion of Pasifika (Pacific Islander) youth. While almost all programs and associated research were culturally appropriate to the overall New Zealand context, they tended to be less culturally appropriate for programs working with Māori and Pasifika youth. Further, there was a negative association between cultural appropriateness and program effectiveness.

**Keywords** Mentoring · Youth · Culture · Program evaluation · Systematic review

## Introduction

Formal youth mentoring programs have been identified as an important social intervention for supporting at-risk youth. Involvement in youth mentoring programs has been associated with greater academic achievement, less absence from school, more positive attitudes toward school, greater well-being, greater connectedness to peers, more positive reactions to situations involving drugs, less likelihood to start using illegal drugs, less engagement in aggression, decreases in skipping school, and decreases in lying to parents (Choi & Lemberger, 2010; Grossman & Tierney, 1998; Karcher, 2008; LoSciuto, Rajala, Townsend, & Taylor, 1996). Effective program characteristics have also been identified, including providing ongoing training and support to mentors, involving parents, being based on both theory and research, and targeting at-risk (versus typical) youth (DuBois, Holloway, Valentine, & Cooper, 2002). Interestingly, matching on gender, race, or interest, which are common practices, may not impact program effectiveness (DuBois et al., 2002).

Much of the research on mentoring has taken place in the U.S., where mentoring is long-established and has many wide-reaching programs. However,

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mentoring is rapidly becoming popular in many countries around the world. Evans and Ave (2000) suggested that practices of mentoring in the U.S. do not necessarily fit with aspects of the New Zealand familial/social structure. While programs based in the U.S. typically involve one-to-one relationships, this may not be appropriate for youth in New Zealand (NZ) where this practice may conflict with social and cultural structures, such as the importance of the group. Further, others have acknowledged the importance of incorporating cultural practices, particularly for indigenous peoples, not only within the context of mentoring (Klinck et al., 2005), but also within the context of school practice (Bishop, 1999; Castango & Brayboy, 2008), community interventions (Allen, Mohatt, Markstrom, Byers, & Novins, *in press*), and health care and education (Banister & Begoray, 2006; Brady, 1995).

#### Mentoring in New Zealand

Māori traditions of *tuakana/teina*, where older *whānau* (Māori word for family that includes extended family) members support younger members, reflect mentoring practices that pre-date European contact. Pre-European Māori lived together in subtribal and tribal communities where groups of older siblings or cousins (*tuakana*) supported the group of younger siblings or cousins (*teina*) in a variety of areas such as training on new tasks, companionship, comfort, and managing minor wrong-doings (Metge, 1995). Formal youth mentoring programs in New Zealand started in the 1980s when the peer support model was imported from Australia and adopted by almost all secondary schools. Since that time, mentoring programs have developed nationally.

A critical role of many mentoring programs in New Zealand has been to support at-risk youth. Areas of vulnerability for youth are seen in educational, health, and social domains, and these issues tend to be particularly pertinent for children and youth living in low socio-economic areas (Gilbert, 2005; Poulton, & Caspi, 2005; St. John & Wynd, 2008). Around 12% of all youth leave school with no qualification (Ministry of Education, 2006). Health-wise, there is a relatively high prevalence of mental illness among New Zealand youth, such as depressed mood (Fortune et al., 2010), with suicide being the second most common cause of death for this sector of the population (Ministry of

Youth Development [MYD], 2003). In terms of family, studies have found that almost half of all New Zealand children experience the separation or divorce of their parents, with just over 25% of all children and youth living in single parent families (MYD, 2003). Many of these issues tend to be particularly pertinent for Māori and Pasifika (Pacific Islander) youth (Ministry of Māori Affairs [MOMA], 2000; Ministry of Pacific Island Affairs [MOPIA], 2003; MYD, 2003), who are more likely to be affected by poverty (St. John & Wynd, 2008) and consequently are a special target of many interventions aimed at at-risk youth. One caveat is that Pasifika families tend to be relatively intact.

While many programs target Māori and Pasifika youth, it is unclear to what degree programs understand and incorporate aspects of Māori and Pasifika culture. In relation to Māori, acknowledging personal Māori identity is an important issue, particularly with youth (Borell, 2005). Issues around schooling and home background, parent/guardian backgrounds, and involvement in *Te Reo Māori me ona Tikanga* (Māori language and culture) are some of the many factors that should be considered; however, there has been difficulty in qualifying and quantifying the “Māoriness” of a young person and what exactly is meant by “Māori identity.” According to O’Regan (1987), Māori identity is structured around three key areas of knowledge. These include knowing who you are, who you are related to, and your descent. Helping the young person to know of his/her *whakapapa* (ancestors), can provide the basis of addressing self-confidence and awareness; if this can be expressed in *Te Reo Māori* (Māori language), the young person’s Māori identity can be further strengthened. In working with Māori youth, Hawk, Cowley, Hill, and Sutherland (2001, as cited in Hammond, 2007, p. 10) suggested that effective relationships between students and teachers/mentors have three characteristics. These are “empathy and an understanding of Māori culture,” “caring about the student,” and “respect for the student.”

In relation to Pasifika youth, like Māori, they have a need to understand their personal/familial history. (While commonalities exist, there is great diversity among Pasifika people as customs, language, and histories vary.) For example, within the Samoan cultural context, identity is linked to three key elements including belonging and connection to *aiga*

(Samoan word for family), ancestral land, and knowledge of the Samoan language (Le Tagaloa, 1997). However, as a migrant community, Pasifika youth find themselves balancing the values of Western society with traditional values which are being reinterpreted by their parents (Anae, 2001). Pasifika youths' needs are located in an identity/culture perspective, but also in the migrant nature of their traverse to New Zealand (Anae, 2001). It should be noted that the Pasifika community is very young, with more than a third of it being under the age of 15 years (Statistics New Zealand, 2006). There is a high proportion of Pasifika young people attending low-income schools and living in some of the poorest communities. Their identity/culture is not only affected by being a migrant community, but also by the sociological factors of having poor health outcomes and low educational achievement in school (MOPIA, 2003).

While each represents a set of unique and diverse cultural values, Māori and Pasifika youth share some similarities, particularly around the meaning and nature of family. This is demonstrated in how family is defined in both the Māori (*whanau*) and the Pasifika cultural context (e.g., Samoan *aiga*) to encompass a broader group of kin (compared with the more nuclear family groupings of NZ European youth). In addition, Māori and Pasifika families are more closely aligned with narrow socialization (valuing conformity and obedience within the context of family socialization), compared to the broad socialization (valuing autonomy, independence, and self-expression within the context of family socialization) of their NZ European counterparts (Arnett, 1995; Pryor, 2006). Larson and Verma (1999) have suggested that differences in family socialization may reflect collectivist (narrow) versus individualistic (broad) values (Triandis et al., 1988). Finally, for both groups, family ancestry forms an integral part of identity (Le Tagaloa, 1997; O'Reagan, 1987) and individual well-being is often linked with collective well-being (e.g., Benton, 2002).

#### Research on Youth Mentoring in New Zealand

Recently, a systematic review was conducted to examine the effectiveness of mentoring among New Zealand youth (Farruggia et al., *in press*). Results showed that while there were 23 active mentoring programs in New Zealand at the time of the review, only 35% had conducted evaluations examining their effectiveness for

mentees. Overall, 88% of the programs included in the review showed some level of effectiveness; however, this finding was tentative due to the varied quality of the research (Farruggia et al., *in press*). Effective programs typically were more established, had a history of evaluation, utilized principles of best practice, had mentoring as a component of other interventions, had adult mentors, utilized one-to-one or mixed (one-to-one in the context of a group) mentoring, were more structured, had greater expectations on the length of the mentor–mentee relationship, worked with low- and mixed-SES youth, and differentiated researchers from practitioners. The current study forms a part of this systematic review.

#### Cultural Considerations Within Youth Mentoring Programs and Research

Sánchez and Cólón (2005) indicated that only a few programs in the U.S. consider the cultural needs of the youth they serve beyond ethnic matching of mentors and mentees, which may not impact program effectiveness (DuBois et al., 2002). Summarizing programs that do consider culture, Sánchez and Cólón concluded that these programs tended to incorporate cultural competency training for mentors, parental involvement, and cultural values and knowledge into the program. Within the New Zealand context, it is argued that programs should provide cultural training to both mentors and staff and incorporate Māori and Pasifika cultural values and practice into the program framework and delivery. This specifically should include (a) involving extended and immediate families, not just parents; (b) acknowledging language and customs (e.g., *tikanga* for Māori); (c) acknowledging cultural identity including family ancestry; and (d) conceptualizing well-being as linked to the collective rather than the individual.

These considerations are directly applicable to those conducting research within programs serving culturally diverse youth. Indeed, there is a growing body of international work that highlights the value of culturally appropriate research methodologies. For instance, Allen et al. (*in press*) point out the importance of understanding kinship relations in the engagement process of research among indigenous communities. Similarly, it has been suggested that understanding and observing indigenous customs within the context of research may increase the

validity of the data (Allen et al., in press; Jahnke & Taipa, 1999). In the New Zealand context, the Health Research Council (2010) has developed a set of guidelines for engaging in health research, broadly defined, involving Māori that identify the importance of consultation and incorporation of Māori protocols and practices as well as incorporating Māori research ethics. Similar guidelines have been developed for Pacific health research, specific towards Pasifika people living in New Zealand (Health Research Council, 2004), and highlight the importance of relationships when conducting research as well as the diversity among Pacific peoples.

### The Current Study

As a large percentage (62%) of mentoring programs in New Zealand have a significant proportion of Māori and Pasifika youth, the cultural framework in which these programs deliver support to young people needs to be examined. This need reflects recommendations by Sánchez and Cólón (2005) to “include specific attention to practices that promote appropriate attention to race, ethnicity, and culture in programs and relationships” (p. 201). Likewise, Evans, Jory, and Dawson (2005) recommended that research on mentoring should incorporate indigenous concepts of knowledge and evidence. Therefore, this systematic review had the following objectives:

1. to describe the cultural characteristics, including program goals, mode of program delivery, risk-status and inclusion of family, and cultural appropriateness of youth mentoring programs in New Zealand;
2. to examine the effectiveness of programs as a function of culture; and
3. to assess the quality of the research on youth mentoring as a function of culture.

Due to the lack of previous research on this topic, analyses were exploratory in nature without specific hypotheses guiding them.

### Methods

The following summarizes the methods used in this systematic review. Please see Farruggia et al. (in press) for a full description.

### Inclusion Criteria

Inclusion criteria were adapted from Tolan, Henry, Schoeny, and Bass (2008) and Littell, Corcoran, and Pillai (2008) and fell into four categories. These included (a) effects assessed (programs were examined for effectiveness for mentees in at least one of the following areas: emotional/psychological, problem/high-risk behavior, academic/educational, career/employment, and social competence); (b) types of participants (the review was limited to New Zealand-based studies whose participants were over the age of 6 years and under the age of 24 years, with the mean age for the sample to be under 20 years); (c) program type (studies were required to involve a formal mentoring program; this could include one-to-one, group, team, peer or e-mentoring); and (d) research design (due to the limited literature on the topic, both quantitative and qualitative studies were included, even those with less rigorous methodologies, and bias was identified).

### Search Strategy

The search strategy for relevant literature was conducted in four primary ways. First, a contact at the Youth Mentoring Network approached all youth mentoring organizations that were part of the Network to request copies of any evaluation reports on their particular program. Second, an extensive database search was conducted including 18 databases using search terms related to youth and mentoring, with “Zealand” always added as a term. Third, an internet search was conducted. Lastly, reference lists of retained reports were checked for further studies that had not been previously identified.

### Selection of Studies

A total of 13,292 studies (unduplicated citations) were identified during the search: 12,761 from electronic databases, 497 from internet searches, 31 from personal contacts, and 3 from prior reviews. A total of 74 were deemed to be potentially relevant to the review based on the citation and abstract. Of these, two were unobtainable and two more studies were not included in this review as they were in progress. All relevant full-text reports that were retained during the literature search were coded using inclusion criteria

described previously and were coded as either met or unmet for each study. This inclusion coding was done by two independent coders; the inter-rater agreement was 83%. All discrepancies were discussed between the coders. If agreement could not be reached, then a third member of the team discussed the coding, and the three came to a decision. A total of 26 studies were coded as meeting the inclusion criteria for the review and were included in this study.

### Data Extraction

A coding sheet was developed for the purposes of extracting relevant information for the review from the included studies. Littell et al.'s (2008) guide to systematic reviews was followed in the creation of the data extraction coding sheet. Previous literature reviews and meta-analyses (i.e., Tolan et al., 2008; DuBois et al., 2002) were also consulted and adapted to fit the New Zealand context. All studies were coded by two of three independent coders. After each study was coded, the two coders made comparisons. Any discrepancies in coding were discussed with the third coder. The initial inter-rater agreement was 80%. If information was not found within the study, the research team attempted to collect missing data from a variety of sources including searching program websites and contacting programs or evaluators.

*Program goals* were coded into 6 categories, including educational, psychological, behavioral, interpersonal, vocational, and cultural goals. Programs could have more than one goal category. These were coded individually as having each specific goal (1) or not (0). *Mode of delivery* was coded as one of the following: one-to-one, group or mixed. Programs could only be coded as one delivery type. For *risk status*, youth in the mentoring programs were coded as either high-risk (e.g., youth offenders, substance problems, clinical/mental health problems, severe family problems, educational failure, residing in an institutional setting), at-risk (e.g., school problems, family problems, low self-esteem without severe problems), typical (low/no risk, typical youth in the community), or mixed. Finally, for *inclusion of families*, programs were coded as having no contact, low (once or twice per year), moderate (every 3 months), or frequent (monthly or more) contact.

Treatment effects were measured in a number of ways as both quantitative and qualitative data were

used in this review. Individual effect indicators were determined for each outcome reported. For quantitative studies, an effect size (Cohen's *d*) for each measure was calculated. Effect sizes of below .20 were seen as signifying unsuccessful outcomes; those with effect sizes between .20 and .35 were seen as indicating moderately successful outcomes, and effect sizes above .35 indicated successful outcomes. Once effect sizes were calculated, results were recoded for each goal domain (i.e., educational, psychological, behavioral, interpersonal, vocational, and cultural) as not effective, mixed or moderately effective, or effective so that results could be combined with qualitative studies. Mixed effects reflected multiple indicators within the same goal domain but with inconsistent results. Coding was done by two raters as part of the overall coding process.

For qualitative studies, outcomes were coded in the data extraction code sheet for success, using the responses choices not effective, mixed results, and effective. To be coded as effective, all or most of the qualitative results needed to have indicated a positive effect. To be coded as mixed, some of the results needed to be effective. To be coded as not effective, none or very few of the results were effective. Once individual outcomes were assessed for effectiveness, these data were aggregated by domain taking into account adverse effects.

At the end of these processes, both quantitative and qualitative results were on the same scale, which allowed for merging the two types of results and, thus, a more complete examination. Based on the combination of quantitative and qualitative results across goal domains, programs were then coded for overall effectiveness in the following categories: not effective (not effective in any domain or using either methodology; very few effects found), mixed/moderately effective (effects found in some domains or had moderate effects across domains), effective (effective in many domains, possibly some minor variation by research methodology), or very effective (consistent, strong effects across domains and methodology).

Programs were classified (Table 1) based on the ethnic characteristics of the mentees as an overall NZ program, Māori program or Pasifika program (not mutually exclusive). When a program had a significant proportion (i.e., 15% or more) of Māori youth or Pasifika youth, they were classified as Māori programs or Pasifika programs, respectively. Programs could

**Table 1** Cultural descriptions of included studies

| Study                   | Program type | Site of program | Program goals  | Cultural characteristics   | Cultural program development  | Cultural coding   |
|-------------------------|--------------|-----------------|--|--|-------------------------------|-------------------|
| Adams (2004)            | One-to-one   | Community       | Academic, behavioral, vocational                               | Unknown, but likely NZ European  | No particular group           | Overall NZ        |
| Afeaki-Mafire 'o (2007) | Mixed        | Schools         | Academic, vocational   | 1 Participant—Samoan/NZ European   | Developed for Pasifika        | Pasifika          |
| Ave et al. (1999)       | One-to-one   | Mixed           | Psychological, interpersonal, behavioral                       | 73% NZ European, 27 % Māori  | Developed for Māori           | Overall NZ, Māori |
| Ballinger et al. (2009) | One-to-one   | Mixed           | Academic, psychological, interpersonal                         | 15% NZ European, 85% unknown, but likely including Māori and NZ European             | No particular group           | Overall NZ, Māori |
| Deane and Harre (2008)  | One-to-one   | Schools         | Academic, psychological, behavioral, interpersonal, vocational | Unknown, but NZ European and Māori indicated as significant                          | No particular group           | Overall NZ, Māori |
| Enkey (2001)            | One-to-one   | Schools         | Academic, psychological, behavioral, interpersonal, vocational | 80% NZ European, 9% Māori, 1% Pasifika, 10% other                                    | No particular group           | Overall NZ        |
| Hammond (2007)          | Group        | School          | Academic, behavioral   | Unknown, but Māori and NZ European indicated as significant                          | No particular group           | Overall NZ, Māori |
| Heke (2005)             | Group        | School          | Academic, behavioral, vocational, cultural                     | 100% Māori   | Developed for Māori           | Māori             |
| Hill (2008)             | One-to-one   | Community       | Academic   | Unknown, but Māori, Pasifika and refugees from North Africa indicated as significant | No particular group           | Māori, Pasifika   |
| Irving et al. (2003)    | One-to-one   | School          | Academic   | Unknown  | No particular group           | Overall NZ        |
| Kostuk-Warren (2005)    | One-to-one   | School          | Academic, psychological, interpersonal                         | 74% NZ European, 15 % Māori, 11 % Other  | No particular group           | Overall NZ        |
| Lennan (2006)           | One-to-one   | Community       | Academic, psychological, behavioral, interpersonal             | Unknown  | No particular group           | Overall NZ        |
| Litchfield (2006)       | One-to-one   | School          | Academic, interpersonal  | 47% NZ European, 13% Māori, 20% Other  | No particular group           | Overall NZ        |
| Lyon (1992)             | One-to-one   | Schools         | Academic, psychological, interpersonal, cultural               | 100% Cambodian   | Developed for Cambodian youth | Overall NZ        |
| McInerney (2005)        | One-to-one   | Community       | Psychological, interpersonal                                   | 81% NZ European, 19% Māori   | No particular group           | Overall NZ, Māori |
| McClellan (2007)        | Group        | Unknown         | Academic, psychological, interpersonal, vocational             | 75% Māori, 25% Māori/Pasifika  | Developed for Māori           | Māori             |

**Table 1** continued

| Study                        | Program type | Site of program | Program goals  | Cultural characteristics                                 | Cultural program development | Cultural coding   |
|------------------------------|--------------|-----------------|--|--|------------------------------|-------------------|
| Milne et al. (2002)          | One-to-one   | Community       | Academic, psychological, behavioral, interpersonal             | 65% NZ European, 27% Māori, 8% other                     | No particular group          | Overall NZ, Māori |
| Ministry of Education (2009) | One-to-one   | Community       | Academic   | 98% Māori, 1% NZ European, 1% Pasifika                   | Developed for Māori          | Māori             |
| Qiao and McNaught (2007)     | One-to-one   | School          | Academic, psychological, behavioral, interpersonal, vocational | 53% NZ European, 28% Māori, 19% other                    | No particular group          | Overall NZ, Māori |
| Selwood (2005)               | One-to-one   | School          | Academic, psychological, interpersonal, cultural               | Unknown, but likely NZ European                          | No particular group          | Overall NZ        |
| Starpath (2006)              | Mixed        | School          | Academic, psychological  | 40% Pasifika, 27% NZ European, 22% Māori                 | No particular group          | Māori, Pasifika   |
| Starpath (2007)              | Mixed        | School          | Academic, psychological  | Unknown, but Māori and Pasifika indicated as significant | No particular group          | Māori, Pasifika   |
| Stevenson (2008)             | Mixed        | School          | Academic, behavioral   | 8% Māori, 92% NZ European                                | No particular group          | Overall NZ        |
| Tasi (2009)                  | One-to-one   | Unknown         | Vocational   | 100% Pasifika  | Developed for Pasifika       | Pasifika          |
| Wilson (2006)                | One-to-one   | School          | Academic   | Unknown  | No particular group          | Overall NZ        |
| YROET (2001)                 | One-to-one   | Unknown         | Academic, psychological, behavioral, interpersonal, cultural   | 71% NZ European, 29% Māori                               | No particular group          | Overall NZ, Māori |

also be classified as an overall NZ program if it had non-Māori or non-Pasifika youth (typically NZ European). Five studies did not provide information on ethnicities of the participants. For two of these (Adams, 2004; Selwood, 2005), the program location indicated a very high likelihood of NZ European youth predominance, and the programs were thus categorized as overall NZ programs. For the remaining three programs (Irving, Moore, & Hamilton, 2003; Lennan, 2006; Wilson, 2006), they were located in an area with a strong potential for cultural diversity. These were also classified as overall NZ programs but noted for having an unknown ethnicity.

A separate culturally appropriate coding process was utilized for cultural appropriateness of the research and programs from the Māori perspective, the Pasifika perspective, and the overall New Zealand perspective based on how the programs were classified. To do this coding, a number of steps were taken. First, a meeting was held with the research team to discuss how cultural appropriateness should be defined. Next, coding sheets with the working definitions of cultural appropriateness were created and are described below. Then, the coding was completed by the cultural experts on the team including Māori and Pasifika authors when the program had a significant proportion of relevant youth in their program (i.e., 15% or more). A member of the research team coded for the overall cultural context, reflecting the ethnically diverse youth population of New Zealand, if both Māori and Pasifika coding were not required. Finally, team members discussed the coding and any issues until agreement was reached.

The coding sheet covered cultural appropriateness relating to the program implementers, the program design, the researcher(s), and the research procedures and analysis. This involved program staff and researchers acknowledging the cultural customs and values of the mentees and embedding them into the programs, research procedures, and interpretation of the results. Cultural appropriateness within the Māori and Pasifika context could include understanding and acknowledging the implications of *Te Tiriti o Waitangi* (the Treaty of Waitangi, a treaty signed by the British and Māori in 1840 that has implications for policy and law); providing cultural training for staff and researchers; using culturally relevant protocols when working and conducting research with mentees (e.g., providing food, not sitting on tables, avoiding

direct eye contact, acknowledging social hierarchies); and consulting with tribal elders on program development, implementation, research procedures, and interpretation of the results. Programs and research were rated on the following scale:

- *Appropriate*: acknowledged cultural issues and demonstrated that they were taken into consideration; provided information about the researcher's and implementer's cultural backgrounds (cultural matching of either mentors or researchers was not required); included cultural competency training of the people delivering the program or conducting the research; analysis took into account the cultural background of the participant; a recognition and understanding of culture;
- *Somewhat appropriate*: acknowledged cultural issues, but did not significantly demonstrate that these were taken into consideration;
- *Inappropriate*: acknowledged cultural issues but included an incorrect response to these issues; and
- *Ignored*: did not acknowledge cultural issues or program implementers or researchers did not attempt to take them into consideration; no information provided about researchers or implementers.

Ratings were scored from 3 (*appropriate*) to 0 (*ignored*), taking into account a holistic understanding of the cultural appropriateness of the program and research. Total scores were calculated to indicate cultural appropriateness in the three cultural domains (overall NZ, Māori and Pasifika contexts) for programs (summing implementer and design) and research (summing researchers and procedures). Each sum ranged from 0 to 6. These total scores were calculated to reduce data and ease interpretation. As expected, correlations among the two related items (e.g., program implementer and design) within each cultural domain were high, all but one were  $r > .60$ .

## Results

The results are divided into four sections. The first section is a description of mentoring programs in New Zealand that were included in this review, focusing on cultural characteristics. The second section is an analysis of the cultural appropriateness of programs and includes a description of key features of programs

**Table 2** Program goals, program types and youth risk status by cultural classification

| Program characteristic                 | Overall NZ<br>( <i>n</i> = 18) (%) | Māori<br>( <i>n</i> = 14) (%) | Pasifika<br>( <i>n</i> = 6) | All programs<br>( <i>n</i> = 26) (%) |
|--|------------------------------------|-------------------------------|-----------------------------|--------------------------------------|
| Goals ( <i>n</i> = 25)                 |                                    |                               |                             |                                      |
| Cultural                               | 18                                 | 23                            | 0                           | 20                                   |
| Academic                               | 91                                 | 92                            | 100%                        | 96                                   |
| Vocational                             | 35                                 | 31                            | 40%                         | 33                                   |
| Behavioral                             | 59                                 | 46                            | 0                           | 44                                   |
| Interpersonal                          | 71                                 | 54                            | 0                           | 52                                   |
| Psychological                          | 77                                 | 62                            | 40%                         | 52                                   |
| Program type ( <i>n</i> = 26)          |                                    |                               |                             |                                      |
| One to one                             | 89                                 | 64                            | 40%                         | 73                                   |
| Group                                  | 6                                  | 21                            | 0                           | 12                                   |
| Mixed                                  | 6                                  | 14                            | 60%                         | 15                                   |
| Risk status ( <i>n</i> = 25)           |                                    |                               |                             |                                      |
| High risk                              | 24                                 | 21                            | 20%                         | 20                                   |
| At-risk                                | 53                                 | 57                            | 80%                         | 56                                   |
| Typical                                | 18                                 | 7                             | 0                           | 16                                   |
| Mixed                                  | 6                                  | 14                            | 0                           | 8                                    |
| Inclusion of families ( <i>n</i> = 21) |                                    |                               |                             |                                      |
| No contact                             | 60                                 | 50                            | 50%                         | 57                                   |
| Low                                    | 13                                 | 8                             | 25%                         | 14                                   |
| Moderate                               | 20                                 | 34                            | 25%                         | 24                                   |
| Frequent                               | 7                                  | 8                             | 0%                          | 5                                    |

coded as highly culturally appropriate. The third section is an analysis of the effectiveness of mentoring programs, examining variation by culture. The fourth and final section is a description of the quality of the research on mentoring programs as a function of culture.

#### Youth Mentoring Programs in New Zealand

This review included 26 research evaluations covering 22 different mentoring programs in New Zealand. (One of these evaluations covered multiple programs, but was assessed as a whole, as not enough details of individual programs were provided.) When examining the studies by culture, 18 studies were classified as relevant to the overall NZ context (hereafter referred to as overall NZ programs); 14 studies were classified as examining program effectiveness with a significant number of Māori youth (hereafter referred to as Māori programs); and six studies were classified as examining program effectiveness with a significant number of Pasifika youth (hereafter referred to as Pasifika programs). It should be noted that studies were

classified in up to two categories if there was diversity within the program. Table 1 provides a description, if known, of the ethnicity of the mentees in programs and if the programs were developed to target a specific cultural group(s). For the targeting of specific cultural groups when developing the program, 18 did not do so, four were developed for Māori, two for Pasifika, one was developed for a different ethnic group, and one was unknown.

Next, variation in program goals (cultural, academic, vocational, behavioral, interpersonal, and psychological), program type (one-to-one, group, mixed), risk-status (high, at-risk, typical, mixed), and the inclusion of families (no contact, minimal, moderate, frequent) were examined as a function of cultural classification (see Table 2). For goals, almost all programs had academic goals, and were equally likely to have vocational goals, regardless of cultural classification (between 31% and 40%). Generally speaking, overall NZ programs and Māori programs were fairly similar with few programs having cultural goals, whereas Pasifika programs had none. For the remaining three domains—behavioral, interpersonal, and

psychological—overall NZ programs were more likely to have these goals, followed by Māori programs, with Pasifika programs the least likely. Larger differences were found for behavioral and interpersonal goals.

For program type, Māori programs were more likely to deliver the mentoring in groups compared to Pasifika programs and overall NZ programs, although it was still relatively unlikely (21%). Pasifika programs were more likely to deliver the mentoring in a mixed format (60%) as compared to Māori programs and overall NZ programs. Overall NZ programs were highly likely to utilize one-to-one delivery (89%). For risk status of the mentees, all programs were somewhat similar. The only variation was that Pasifika programs were more likely to target at-risk youth (80%) compared to Māori programs (57%) or overall NZ programs (53%). Finally, for the inclusion of families, generally, programs typically did not include families in any meaningful way. At least 50% of programs, regardless of cultural classification, had no contact with family. Māori programs did appear to have higher levels of family involvement once no contact was accounted for, with 42% having moderate or frequent contact as compared to 25% for Pasifika programs and 27% for overall NZ programs. It should be noted that there were substantial missing data for this question ( $n = 5$ ; 24%); however, it is likely that these missing data reflected no or low family contact as this was not noted as an integral part of the program.

### Cultural Appropriateness of Programs

Next, the cultural appropriateness of programs was examined. Overall NZ programs (18 studies assessed) were typically assessed to be highly culturally appropriate. Only one was assessed as being moderately appropriate whereas all of the others ( $n = 17$ ) were assessed as being highly appropriate (program:  $M = 2.94$ ,  $SD = .24$ ; implementer:  $M = 2.94$ ,  $SD = .24$ ; program total:  $M = 5.89$ ,  $SD = .47$ ). For Māori programs (14 studies assessed), cultural appropriateness findings were less favorable. A large proportion (50%) of programs were rated as having completely ignored Māori culture, and less than one quarter (21%) of programs were rated as being highly culturally appropriate (program:  $M = 1.14$ ,  $SD = 1.29$ , implementer:  $M = 1.14$ ,  $SD = 1.29$ ; program total:  $M = 2.29$ ,  $SD = 2.58$ ). For Pasifika programs (six studies

assessed), findings again were less favorable but slightly better than for Māori programs. Only one of the six Pasifika programs was highly appropriate from a Pasifika perspective with most programs falling in the moderate range ( $n = 3$ ; 50%). The remaining programs were low ( $n = 1$ ) or ignored ( $n = 1$ ; program:  $M = 1.33$ ,  $SD = .82$ , implementer:  $M = 1.67$ ,  $SD = 1.03$ ; program total:  $M = 3.00$ ,  $SD = 1.79$ ).

Programs that were rated as being highly appropriate for the overall NZ context typically considered the local needs and values of the youth when they designed and implemented their programs. An example of this is incorporating outdoor adventure into the mentoring program delivery. For Māori and Pasifika culture, programs that were highly appropriate had similar features. These features typically included Māori/Pasifika community members in the design and implementation of the program, incorporated group mentoring either exclusively or in conjunction with one-to-one mentoring, and addressed some of the considerations described in the introduction such as language and customs. While this relationship existed, it should be noted that a program did not need to be developed specifically for a cultural group for it to be culturally appropriate. Likewise, a program that had not been developed for a specific cultural group could be coded as culturally appropriate.

### Effectiveness of Programs as a Function of Cultural Appropriateness

Program cultural appropriateness was examined to see if there was an association with program effectiveness. As there was little variability in the cultural appropriateness from the overall NZ perspective, this was not included in these analyses. For Māori cultural appropriateness, there appeared to be a negative association: programs that were more culturally appropriate from a Māori perspective tended to be less effective. For instance, 3 of the 7 Māori programs were assessed as having ignored Māori culture were effective (effective or very effective) whereas none of the highly culturally appropriate programs were effective (all were ineffective or mixed/moderately effective). For Pasifika cultural appropriateness, there did not appear to be an association with program effectiveness; however, as the sample was relatively small, associations may not have been detected.

## Research on Youth Mentoring

The type of methodology (qualitative, quantitative, or mixed methods) used to investigate program effectiveness was examined for variation by cultural classification (overall NZ programs, Māori programs, and Pasifika programs). For overall NZ programs, researchers were somewhat evenly split on methodology (28% qualitative, 39% quantitative, and 33% mixed). Studies investigating Māori programs were more likely to utilize mixed methods and somewhat less likely to use the other two methodologies (21% qualitative, 29% quantitative, and 50% mixed). Studies investigating Pasifika programs, however, had no quantitative-only studies and a high proportion of mixed studies (33% qualitative, 0% quantitative, and 66% mixed).

Next, the cultural appropriateness from the perspectives of overall NZ, Māori, and Pasifika of the research (researcher, procedures, and total) was examined. Findings were similar to those of program cultural appropriateness. From the overall NZ perspective, the research was assessed as highly appropriate (researcher:  $M = 2.94$ ,  $SD = .24$ ; procedures:  $M = 2.89$ ,  $SD = .32$ ; research total:  $M = 5.83$ ,  $SD = .51$ ); only one study was rated as being moderately appropriate. From the Māori perspective, the research was less appropriate as compared to the overall NZ perspective. Again, 50% of the research completely ignored Māori culture with only 29% being highly appropriate (researcher:  $M = 0.79$ ,  $SD = 1.31$ ; procedures:  $M = 1.36$ ,  $SD = 1.45$ ; research total:  $M = 2.14$ ,  $SD = 2.48$ ). Slightly more favorable results were found for research from the Pasifika perspective as 50% were highly culturally appropriate ( $n = 3$ ), one was moderately culturally appropriate, and two had low levels of cultural appropriateness (researcher:  $M = 1.67$ ,  $SD = 1.51$ ; procedures:  $M = 2.33$ ,  $SD = .82$ ; research total:  $M = 4.00$ ,  $SD = 1.90$ ).

## Discussion

This study was a systematic review of youth mentoring in New Zealand utilizing a cultural lens. It addressed a gap in the literature which stemmed from existing questions about the cultural appropriateness of utilizing overseas program models and research on

those programs. The review had three aims: (a) to describe the cultural characteristics and cultural appropriateness of youth mentoring programs in New Zealand, (b) to examine the effectiveness of programs as a function of culture, and (c) to assess the quality of the research on youth mentoring as a function of culture. It is believed to be the first study that has looked at the cultural appropriateness of mentoring programs and the research on those programs.

Out of the 26 studies included in this review, 14 had significant proportions of Māori youth and 6 had significant proportions of Pasifika youth. Despite the non-trivial proportion of Māori and Pasifika youth in these programs, very few programs were developed in a manner that took into account the cultural backgrounds of the youth they intended to serve. Therefore, it is not surprising that programs with a high proportion of Māori and Pasifika youth and the research that evaluate those programs tended to have low levels of cultural appropriateness. This is particularly true for programs with and research about Māori youth. Programs need to consider how culture provides an important context for many youth (Sánchez and Cólón, 2005). Indeed, within the New Zealand cultural context, ethnic identity and cultural affiliation are important to most young people (Adolescent Health Research Group, 2008) and, at a policy level, are recognized as important to adolescent well-being (MYD, 2002).

It was interesting that despite the salience of families within both the Māori and Pasifika cultural context, programs for the most part had little or no family involvement. This was particularly important given the strong links between family/extended family and identity (Le Tagaloa, 1997; O'Reagan, 1987). Indeed, research in the U.S. (DuBois et al., 2002; Grossman and Rhodes, 2002; Jekielek et al., 2002) has found that the support and involvement of family is associated with greater program effectiveness.

A key finding was that programs that were more culturally appropriate for Māori tended to be less effective whereas programs that were more effective tended to be less culturally appropriate for Māori, creating an interesting paradox. (There was no association between cultural appropriateness and effectiveness for programs with a significant proportion of Pasifika.) A number of non-mutually exclusive explanations are offered. First, the programs may have had

different priorities. The more effective programs may have prioritized best practice and meeting program goals whereas the more culturally appropriate programs may have prioritized getting culture “right.” As mentoring in New Zealand is still relatively young and many programs are still developing, it seems that effective but less culturally appropriate programs working with Māori and Pasifika should consider incorporating cultural goals, particularly around identity (MYD, 2002) if they do not have them (only 20% of all programs had cultural goals). Likewise, less effective but culturally appropriate programs working with Māori and Pasifika youth should incorporate elements of best practice, particularly around administration and quality assurance.

An additional explanation for the negative association between program effectiveness and cultural appropriateness relates to the program goals. It has been previously found (Farruggia et al., in press) that programs with interpersonal and psychological goals are more likely to be effective as compared to other goal types. Programs with high proportions of Māori and Pasifika were less likely to have these goal types as compared to programs with an emphasis on the overall NZ context. Therefore, programs with high proportions of Māori and Pasifika youth may have only targeted the “harder” goals.

A final but important point is the overall lack of consideration of a culturally sensitive research approach when evaluating programs with significant proportions of Māori and Pasifika youth. It should be noted that some research was culturally appropriate, but this was a relatively small proportion. Jahnke and Taipa (1999) have indicated that when conducting research with Māori, culturally sensitive approaches can increase both validity and reliability; this position has been reiterated by international researchers as well (e.g., Allen et al., in press). One qualitative methodology, *talanoa* (Vaiolenti, 2006), has been noted as being culturally appropriate for research among Pasifika families. In this methodology, participants and researchers “sit around the mat” during a focus group so that all are equally allowed the opportunity to talk. This process removes established cultural hierarchies between participants as well as between researchers and participants and consequently may encourage more in-depth and frank discussions. By not utilizing a cultural framework, it is possible that effects that may have been present were not found. As

programs for Māori and Pasifika youth tended to be less effective, this is an important point. The question arises that if the research had been conducted in a more culturally appropriate manner, would the programs have been found to be more effective?

### Limitations and Future Directions

Three important limitations should be noted. First, due to the great variability in the quality of the research, the findings presented here related to effectiveness should be interpreted as tentative. This highlights the need for researchers evaluating mentoring programs to: provide better quality assurance, utilize culturally sensitive methodologies, and include cultural appropriateness within evaluation rubrics. In addition, more than one study on the same program was included in this review, under the assumption that the participants were different and the findings were different. This could have created bias in the data as those programs would have had a greater contribution to the findings as compared to programs with only one study. Once a greater body of high quality research is developed, future research should examine the cultural context of youth mentoring in greater depth. Finally, some of the studies did not indicate the ethnicity of the participants. It is possible that some of these should have been coded for cultural appropriateness from Māori and Pasifika perspectives. This is important information that would be identified during the peer-review process; therefore, it is likely that as higher quality research becomes available, this limitation will not be found in the future.

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### References

- References marked with an asterisk indicate studies included in the systematic review.
- \*Adams, R. J. (2004). *Constructing meaning from mentoring: The experiences of mentors and mentees*. Unpublished master's thesis, University of Canterbury, Christchurch,

- New Zealand. Retrieved from UC Repository (10092/2569).
- Adolescent Health Research Group. (2008). *Youth'07: The health and wellbeing of secondary school students in New Zealand: Initial findings*. Auckland, New Zealand: University of Auckland.
- \*Afeaki-Mafile'o, E. (2007). Affirming works: A collective model of Pasifika mentoring. In P. Culbertson, M. Nelson Agee, & C. 'Ofa makasiale (Eds.), *Penina uliuli: Contemporary challenges in mental health for Pacific peoples* (pp. 16–25). Honolulu, HI: University of Hawai'i Press.
- Allen, J., Mohatt, G. V., Markstrom, C. A., Byers, L., & Novins, D. K. (in press). "Oh no, we are just getting to know you": The relationship in research with children and youth in indigenous communities. *Child Development Perspectives*. doi:10.1111/j.1750-8606.2011.00199.x.
- Anae, M. (2001). The new 'Vikings of the sunrise': New Zealand-borns in the information age. In C. Macpherson, P. Spoonley, & M. Anae (Eds.), *Tangata O Te Moana Nui: The evolving identities of Pacific peoples in Aotearoa/New Zealand* (pp. 101–121). Palmerston North, New Zealand: Dunmore Press Ltd.
- Arnett, J. J. (1995). Broad and narrow socialization: The family in the context of a cultural theory. *Journal of Marriage & the Family*, 57, 617–628. Retrieved from <http://www.jstor.org.ezproxy.auckland.ac.nz/journals/00222445.html>.
- \*Ave, K., Evans, I., Hamerton, H., Melville, L., Moeke-Pickering, T., & Robertson, N. (1999). *Mentoring for children/youth at risk demonstration project: Final evaluation report*. Wellington, New Zealand: The Crime Prevention Unit, Department of the Prime Minister and Cabinet.
- \*Ballinger, S., Mason, N., & Waring, M. (2009). YWCA future leaders evaluation: A report for the YWCA Auckland. Auckland, New Zealand: AUT University, Consulting and Training.
- Banister, E. B., & Begoray, D. L. (2006). A community of practice approach for Aboriginal girls' sexual health education. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 15, 168–173.
- Benton, R. A. (2002). *Well-being and disparity in Tamakimakaurau* (Vol. 1). Wellington, New Zealand: Te Puni Kokiri/Ministry of Maori Development.
- Bishop, R. (1999). *Culture counts: Changing power relations in education*. Palmerston North, New Zealand: Dunmore Press.
- Borell, B. (2005). Living in the city ain't so bad: Cultural identity for young Māori in South Auckland. In J. H. Lui, T. McCreaner, T. McIntosh, & T. Teaiwa (Eds.), *New Zealand identities: Departures and destinations* (pp. 191–206). Wellington, New Zealand: Victoria University Press.
- Brady, M. (1995). Culture in treatment, culture as treatment. A critical appraisal of developments in addictions programs for indigenous North Americans and Australians. *Social Science and Medicine*, 48, 1487–1498.
- Castagno, A. E., & Brayboy, B. M. J. (2008). Culturally responsive schooling for indigenous youth: A review of the literature. *Review of Educational Research*, 78, 941–994.
- Choi, S., & Lemberger, M. E. (2010). Influence of a supervised mentoring program on the achievement of low-income South Korean students. *Mentoring & Tutoring: Partnership in Learning*, 18, 215–231. doi:10.1080/13611267.2010.492939.
- \*Deane, K., & Harre, N. (2008). *Executive summary of results for Project K quantitative evaluation measures from pre- to post- program*. Auckland, New Zealand: The University of Auckland, Department of Psychology.
- DuBois, D. L., Holloway, B. E., Valentine, J. C., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology*, 30, 157–197. doi:10.1023/A:1014628810714.
- \*Enkey, R. F. (2001). *A research and program evaluation of the North Shore Education Trust Project K*. Auckland, New Zealand: Project K.
- Evans, I. M., & Ave, K. T. (2000). Mentoring children and youth: Principles, issues, and policy implications for community programs in New Zealand. *New Zealand Journal of Psychology*, 29, 41–49. Retrieved from [http://www.psychology.org.nz/NZ\\_Journal](http://www.psychology.org.nz/NZ_Journal).
- Evans, I. M., Jory, A., & Dawson, N. (2005). International: Australia and New Zealand. In D. L. DuBois & M. J. Karcher (Eds.), *Handbook of youth mentoring* (pp. 408–421). Thousand Oaks, CA: Sage.
- Farruggia, S. P., Bullen, P., Davidson, J., Dunphy, A., Solomon, F., & Collins, E. (in press). The effectiveness of youth mentoring programmes in New Zealand. *New Zealand Journal of Psychology*.
- Fortune, S., Watson, P., Robinson, E., Fleming, T., Merry, S., & Denny, S. (2010). *Youth'07: The health and wellbeing of secondary school students in New Zealand: Suicide behaviours and mental health in 2001 and 2007*. Auckland, New Zealand: The University of Auckland.
- Gilbert, J. (2005). *Educational issues for communities affected by transience and residential mobility report on phase 1 (2003–2004)*. Wellington, New Zealand: New Zealand Council for Educational Research. Retrieved from <http://www.nzcer.org.nz/pdfs/14354.pdf>.
- Grossman, J. B., & Rhodes, J. E. (2002). The test of time: Predictors and effects of duration in youth mentoring relationships. *American Journal of Community Psychology*, 30, 199–219.
- Grossman, J. B., & Tierney, J. P. (1998). Does mentoring work? An impact study of the Big Brothers Big Sisters program. *Evaluation Review*, 22, 403–426. doi:10.1177/0193841X9802200304.
- Hammond, J. (2007). *Relationships matter: An evaluation of the student engagement initiative at a girl's secondary school*. Unpublished research project, University of Canterbury, Christchurch, New Zealand.
- Health Research Council. (2004). *Guidelines on pacific health research*. Auckland, New Zealand: Health Research Council of New Zealand. Retrieved from <http://www.hrc.govt.nz>.
- Health Research Council. (2010). *Guidelines for researchers on health research involving Māori*. Auckland, New Zealand: Health Research Council of New Zealand. Retrieved from <http://www.hrc.govt.nz>.
- \*Heke, J. I. (2005). *Hokowhitu: A sport-based program to improve academic, career, and drug and alcohol awareness in adolescent Māori*. Unpublished doctoral thesis, University of Otago, Dunedin, New Zealand.
- \*Hill, J. (2008). *'I Have A Dream' a report for the IHAD Foundation: An evaluation of the program and outcomes*

- for students. Auckland, New Zealand: The Education Group Ltd.
- \*Irving, E., Moore, D. W., & Hamilton, J. (2003). Mentoring for high ability high school students. *Education & Training*, 45, 100–109. doi:10.1108/00400910310464071.
- Jahnke, H., & Taipa, J. (1999). Māori research. In C. Davidson & M. Tolich (Eds.), *Social science research in New Zealand* (pp. 39–50). Auckland, New Zealand: Pearson Education.
- Jekielek, S. M., Moore, K. A., Hair, E. C., & Scarupa, H. J. (2002). *Mentoring: A promising strategy for youth development*. Retrieved from Child Trends website: [http://www.childtrends.org/Files/Child\\_Trends-2002\\_02\\_01\\_RB\\_Mentoring.pdf](http://www.childtrends.org/Files/Child_Trends-2002_02_01_RB_Mentoring.pdf).
- Karcher, M. J. (2008). The study of mentoring in the learning environment (SMILE): A randomized evaluation of the effectiveness of school-based mentoring. *Prevention Science*, 9, 99–113.
- Klinck, J., Cardinal, C., Edwards, K., Gibson, N., Bisanz, J., & da Costa, J. (2005). Mentoring programs for Aboriginal youth. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health*, 3, 109–130.
- \*Kostuk-Warren, J. (2005). *Adolescent well-being: Effects of time and intervention*. Unpublished doctoral thesis, The University of Auckland, Auckland, New Zealand.
- Larson, R., & Verma, S. (1999). How children and adolescents spend time across the world: Work, play, and developmental opportunities. *Psychological Bulletin*, 125(6), 701–736. Retrieved from <http://psycnet.apa.org.index.cfm?fa=browsePA.volumes&jcode=bul>.
- Tagaloa, Le. (1997). *O le Faasinomaga: Le tagata ma lona faasinomaga*. Alafua, Samoa: Lamepa Press.
- \*Lennan, M. (2006). *Evaluation report of the Big Buddy Mentoring Trust*. Auckland, New Zealand: Author.
- \*Litchfield, J. E. (2006). *Boys talk about mentoring and "stuff": A small-scale evaluation of Y9-Y13 mentoring relationships in a boys' high school*. Unpublished master's thesis, The University of Auckland, Auckland, New Zealand.
- Littell, J. H., Corcoran, J., & Pillai, V. (2008). *Systematic reviews and meta-analysis*. New York, NY: Oxford University Press.
- LoSciuto, L., Rajala, A. K., Townsend, T. N., & Taylor, A. S. (1996). An outcome evaluation of across ages: An inter-generational mentoring approach to drug prevention. *Journal of Adolescent Research*, 11, 116–129. doi:10.1177/0743554896111007.
- \*Lyon, D. R. (1992). *The adjustment problems of Cambodian secondary school students: An exploratory survey and an innovative buddy system intervention*. Unpublished master's thesis, The University of Auckland, Auckland, New Zealand.
- \*McClellan, D. (2007). *Evaluating the early impact of the Rangatahi Māori Mentoring Program developed to encourage and support Māori secondary school students to pursue a career in health*. Unpublished master's thesis, Griffith University, Queensland, Australia.
- \*McInerny, J. (2005). *The buddy program at presbyterian support Southland child and family services: Five years on....* Unpublished master's thesis, University of Otago, Dunedin, New Zealand.
- Metge, J. (1995). *New growth from old: The Whānau in the modern world*. Wellington, New Zealand: Victoria University Press.
- \*Milne, B. J., Chalmers, S., Waldie, K. E., Darling, H., & Poulton, R. (2002). Effectiveness of a community-based truancy intervention: A pilot study. *New Zealand Journal of Educational Studies*, 37, 191–203.
- Ministry of Education. (2006). *Student outcome overview 2001–2005*. Wellington, New Zealand: Author.
- \*Ministry of Education. (2009). *Review of targeted policies and programs: Mapihi Pounamu and He Ara Tika Māori participation initiatives*. Wellington, New Zealand: Author.
- Ministry of Māori Affairs/Te Puni Kokiri. (2000). *Progress towards closing social and economic gaps between Māori and non-Māori*. Wellington, New Zealand: Author.
- Ministry of Pacific Island Affairs. (2003). *Ala fou—New pathways: Strategic directions for Pacific youth in New Zealand*. Wellington, New Zealand: Author.
- Ministry of Youth Development. (2003). *12 to 24: Young people in New Zealand*. Wellington, New Zealand: Author.
- Ministry of Youth Development. (2002). *Youth development strategy Aotearoa*. Wellington, New Zealand: Author.
- O'Regan, T. (1987). Who owns the past? Change in Māori perceptions of the past. In J. Wilson (Ed.), *From the beginning: The archaeology of the Māori* (pp. 21–26). Dunedin, New Zealand: Otago University.
- Poulton, R., & Caspi, A. (2005). Commentary: How does socioeconomic disadvantage during childhood damage health in adulthood? Testing psychosocial pathways. *International Journal of Epidemiology*, 34, 344–345. doi:10.1093/ije/dyi044.
- Pryor, J. (2006). New Zealand families: Diversity and change. In J. Low & P. Jose (Eds.), *Lifespan development: New Zealand perspectives* (pp. 158–167). Auckland, New Zealand: Pearson Education.
- \*Qiao, C., & McNaught, H. (2007). *Evaluation of Project K*. Wellington, New Zealand: Ministry of Social Development. Centre for Social Research and Evaluation Te Pokapū Rangahau Arotaki Hapori.
- Sánchez, B., & Cólón, Y. (2005). Race, ethnicity, and culture in mentoring relationships. In D. L. DuBois & M. J. Karcher (Eds.), *Handbook of youth mentoring* (pp. 191–204). Thousand Oaks, CA: Sage.
- \*Selwood, J. (2005). *Perspectives on a deaf mentoring program: Does it make a difference?* Unpublished research project, Christchurch College of Education Christchurch, New Zealand. Retrieved from UC Research Repository (10092/2867).
- St. John, S., & Wynd, D. (2008). *Left behind: How social & income inequalities damage New Zealand Children*. Auckland, New Zealand: Child Poverty Action Group Inc. Retrieved from: <http://www.cpag.org.nz/assets/Publications/LB.pdf>.
- \*Starpath. (2006). *MATES 2005 evaluation*. Starpath technical report 15.1. Auckland, New Zealand: Author.
- \*Starpath. (2007). *MATES 2006 evaluation*. Starpath technical report 15.2. Auckland, New Zealand: Author.
- Statistics New Zealand/Tatauranga Aotearoa. (2006). 2006 census data: Quick statistics about New Zealand. Retrieved 26 May 2008, from Statistics New Zealand Website: <http://www.stats.govt.nz/census/census>.

- \*Stevenson, L. (2008). *Personalised learning in a web 2.0 environment*. Unpublished master's thesis, University of Waikato, Hamilton, New Zealand.
- \*Tasi, B. S. (2009). *Supporting youth for work in New Zealand: A case study of the Samoan experience*. Unpublished master's thesis, The University of Auckland, Auckland, New Zealand.
- Tolan, P., Henry, D., Schoeny, M., & Bass, A. (2008). *Mentoring interventions to affect juvenile delinquency and associated problems*. Chicago, IL: The University of Illinois at Chicago, Institute for Juvenile Research.
- Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M., et al. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology*, 54, 323–338. doi: [10.1037/0022-3514.54.2.323](https://doi.org/10.1037/0022-3514.54.2.323).
- Vaioleti, T. M. (2006). Talanoa research methodology: A developing position on Pacific research. *Waikato Journal of Education*, 12, 21–34. Retrieved from <http://www.soe.waikato.ac.nz/wje/index2.html>.
- \*Wilson, S. (2006). Improving retention and success: A case study approach for practical results. *Journal of College Student Retention: Research, Theory and Practice*, 7, 245–261. doi: [10.2190/7EW7-X9HH-6UE6-EK5H](https://doi.org/10.2190/7EW7-X9HH-6UE6-EK5H).
- \*Youth at Risk of Offending Team. (2001). *Evaluation of the one to one mentoring program, Nelson*. Nelson, New Zealand: Author.