

Diversity, Merit, Fairness, and Discrimination Beliefs as Predictors of Support for Affirmative-Action Policy Actions¹

CHRISTOPHER L. ABERSON²
Humboldt State University

This paper explores support for hiring policies associated with affirmative action (AA) using a model including beliefs regarding the fairness of AA, merit, value of diversity, prevalence of discrimination, personal self-interest, and demographic characteristics. Participants ($n = 212$) evaluated 8 hiring policies ranging from the use of strong preferential treatment to race-blind policies. Beliefs affected support for policies differently. For example, diversity valuation predicted support for policies involving preferences and recruitment, but predicted opposition to race-blind approaches, whereas support for the merit principle predicted opposition to preferences and support for race-blind approaches. Results suggest that established predictors of attitudes toward AA do not necessarily predict support for specific forms of AA.

Affirmative action (AA) is guided by the goal of eliminating discrimination against women and ethnic minorities (Kravitz et al., 1997). Organizations develop monitoring systems and, if discrimination exists, procedures to address biases (Crosby, Iyer, Clayton, & Downing, 2003). With this flexibility comes many ways to implement AA. Possibly because of the variety of ways that organizations apply AA, there exists no shared definition of the policy (Stephanopoulos & Edley, 1995). However, how individuals define AA is relevant to their attitudes toward the policy.

There is considerable research indicating that beliefs about AA and beliefs about policy actions associated with AA (e.g., that policies use quotas) influence support for AA in general (e.g., Golden, Hinkle, & Crosby, 2001; Kravitz & Klineberg, 2000). This paper explores factors that influence support for actions associated with affirmative-action policies (AAPs) and what policy actions respondents view as typical of AA.

Although there is an extensive literature examining attitudes toward AA in general, less is known about factors related to support for specific policy actions. The distinction between AA in general and specific policy actions is important, because when individuals encounter AA, it is policy actions they

¹Portions of this paper were presented at the Western Psychological Association Conferences: Vancouver, BC, May 2003; and Portland, OR, May 2005.

²Correspondence concerning this article should be addressed to Chris Abernson, Department of Psychology, Humboldt State University, Arcata, CA 95521. E-mail: CLA18@humboldt.edu

encounter. Previous work demonstrated that attitudes toward AA in general are more broadly researched and better explained by predictors than are attitudes toward specific policies (Harrison, Kravitz, Mayer, Leslie, & Lev-Arey, 2006). Examining predictors of support for policy actions is an important step in developing prediction models for understanding reactions to actual AAPs.

Model of Factors Influencing Support for Affirmative Action

Central to this work is a model of attitudes toward AA that includes two major categories of predictors of policy support, beliefs relevant to AA, and individual characteristics (Kravitz & Klineberg, 2000). Previous work using this model included the fairness of AA and prevalence of discrimination as beliefs, and individual characteristics such as personal self-interest, political orientation, and sex. The present study expands on previous work using this model by adding measures of the endorsement of the merit principle and belief in the value of diversity (e.g., Aberson & Haag, 2003).

The current study applies this model to predicting support for eight policy actions. Each action is presented as a description of a hiring policy. Descriptions comprised four categories, representing strong preferences, softer preferences, recruitment and training, and race-blind policies.

Strong-preferences policies involved selection of unequal or unqualified candidates based on minority status (e.g. Plous, 1996, 2003) and policies utilizing quotas. *Softer preference policies* involved favoring ethnic minority candidates over Whites when candidates were equally (e.g., tiebreaker) or comparably (e.g., banding) qualified. *Recruitment and training policies* focused on outreach efforts to attract more diverse applicants and training to improve qualifications of potential minority applicants. *Race-blind policies* eliminated candidate ethnicity from information provided to decision makers.

The inclusion of these policy categories is important to the study of AAPs, as there is limited work examining soft preferences, recruitment and training, and race-blind approaches (see Harrison et al., 2006). Several previous studies examined multiple AAPs (e.g., Kravitz, 1995; Kravitz & Platania, 1993; Summers, 1995). I expand on this work by applying a detailed prediction model to attitudes toward multiple policies.

Several of the policies that are examined, such as some of the strong preferences and race-blind approaches, are not true AAPs. Indeed, strict quotas or policies requiring hiring of unqualified applicants are illegal (Spann, 2000), and some suggest that inclusion of such policies in research perpetuates incorrect public beliefs about AA (e.g., Harrison et al., 2006).

However, it is important to include these approaches, as many individuals believe policies using quotas or requiring hiring of unqualified applicants are defining characteristics of AA (e.g., Golden et al., 2001). Additionally, race-blind policies are not necessarily a form of AA, and preference policies such as tiebreakers and banding are relatively uncommon applications of AA.

Predictors of Support for Affirmative Action

The following sections examine relationships between support for AAPs and beliefs about the fairness of AA, endorsement of the merit principle, valuation of diversity, belief in the prevalence of discrimination, self-interest, liberality, and sex. This study expands on previous work using Kravitz and Klineberg's (2000) model in two important ways. First, I included endorsement of the merit principle and valuation of diversity as belief measures (e.g., Aberson & Haag, 2003). Second, instead of examining perceptions of the fairness of AA and self-interest as predictors, I focused on perceptions of fairness and self-interest in combination with how strongly participants associated specific applications with AA.

Fairness of Affirmative Action

The relationship between perceptions that AA is unfair, and opposition to the policy is well documented (e.g., Kravitz, 1995; Kravitz & Klineberg, 2000; Taylor-Carter, Doverspike, & Alexander, 1995). People who view AA as unfair may do so because of violation of procedural justice principles (Bobocel, Son Hing, Davey, Stanley, & Zanna, 1998). Procedural justice perceptions are influenced by the consistency of procedures associated with decisions (Thibaut & Walker, 1975).

Research on hiring preference approaches has suggested that these policies violate procedural justice beliefs because minority or gender status is advantageous for members of some groups, but a disadvantage for others (Bobocel et al., 1998). For example, when evaluating policies wherein ethnicity serves to break ties between equally qualified candidates, respondents may consider the preferential selection of minority applicants as unfair (e.g., Kravitz & Klineberg, 2000). Violation of consistency principles results in perceptions that procedures are unfair, leading to policy opposition.

The current study focuses on perceptions of the fairness of AA in combination with how strongly participants associate policies with AA. The rationale for this approach is that general AA attitudes may color evaluations of any hiring policy to the extent that the policy is viewed as represen-

tative of AA. This is particularly so when individuals view AA as unfair and classify a policy as typical of AA. Since applications of AA include many approaches, it is likely that most individuals who encounter an AAP are being exposed to that policy for the first time. In this context, reactions to a policy can reflect general beliefs about AA, rather than specific beliefs about the policy. Perceptions of the fairness of AA should impact reactions to specific hiring policies only to the extent that the individual views each policy as typical of AA.³

Hypothesis 1. Perceiving AA as fair will positively relate to support for AAPs. This relationship will exist only to the extent that the individual views a policy as typical of AA.

Endorsement of the Merit Principle

In the current study, *merit* refers to beliefs related to the consideration of qualifications in hiring. Individuals who strongly endorse the merit principle believe that only qualifications and ability should impact hiring decisions. Endorsement of the merit principle can serve a distributive-justice function. Distributive justice refers to perceptions of the fairness of the distribution of outcomes (Adams, 1965). Related to AA, distributive-justice violations can occur when individuals perceive that opportunities are not allocated to the most meritorious applicants (e.g., Nacoste, 1987).⁴

Several studies have examined the role of merit beliefs in predicting support for AA and perceptions of AA beneficiaries. Stronger beliefs in merit (e.g., “People who do their job well ought to rise to the top”) related to opposition to AAPs (Bobocel et al., 1998). Studies examining reactions to AA recipients have indicated that recipients are perceived as less qualified than are non-recipients (e.g., Garcia, Erskine, Hawn, & Casmay, 1981; Heilman, Battle, Keller, & Lee, 1998; Heilman, Block, & Lucas, 1992), indicating that some individuals view AA as incompatible with the merit principle.

Since preference policies deal specifically with qualifications, greater endorsement of the merit principle should correspond to opposition to

³Another approach would be to measure perceptions of fairness for each policy. Although this approach is reasonable, recent meta-analytic evidence suggests a strong association between attitudes toward AA and fairness ratings ($r = .80$ when adjusted for attenuation; Harrison et al., 2006). This relationship led Harrison et al. to consider both measures as outcome variables, rather than using fairness as a predictor. In the current study, such a fairness measure might be better conceptualized as an outcome variable, rather than a predictor.

⁴Violation of the principle of consistency across people may also lead to violations of distributive justice because outcomes are affected by inappropriate inputs, such as demographic status.

preferences. However, some preference policies—specifically, banding and tiebreak—focus on the hiring of qualified applicants and may not produce opposition on the grounds of merit. Consistent with this proposition, Aberson and Haag (2003) found no relationship between endorsement of the merit principle and support for tiebreak and banding policies. Similarly, Bobocel et al. (1998) found no association between meritocracy beliefs and support for tiebreaker policies. These results suggest that selection among equally or comparably qualified candidates may not violate distributive-justice concerns (however, see Heilman et al., 1998).

Based on these findings, no relationship between merit beliefs and tiebreak or banding is expected. Recruitment and training do not reference qualifications, so I expect no relationship between endorsement of the merit principle and support for these policies. Although there is no mention of qualifications in the race-blind policy, respondents may perceive that if decisions are not affected by race, then merit will guide decisions. This suggests a positive association between meritocracy beliefs and support for race-blind approaches.

Hypothesis 2. Endorsement of the merit principle will relate to opposition to policies involving quotas, hiring unqualified and less qualified applicants, and support for race-blind policies.

Valuation of Diversity

Individuals may support AA because they believe that the outcomes of AAPs—namely, increases in diversity—are valuable. Those individuals who are concerned with promoting diversity focus on the outcomes of AA, potentially independent of the selection processes (i.e., procedural justice) or the qualifications of individuals (i.e., distributive justice).

Outcome-related evaluation may be understood in the context of fairness heuristic theory (e.g., van den Bos, Wilke, Lind, & Vermunt, 1998). Fairness heuristic theory suggests that a focus on outcomes before procedures affects procedural and distributive-justice concerns. For example, one study varied presentation of procedures and favorable outcomes, then assessed judgments of procedural and distributive fairness. Relevant to the current study, participants who learned about procedures prior to outcomes rated accurate selection procedures and the outcomes resulting from these procedures as more fair than inaccurate procedures. That is, participants rated both procedures and outcomes as fair (i.e., procedurally and distributively justified).

However, when favorable outcome information preceded information about procedures, participants rated procedures and outcomes resulting

from both accurate and inaccurate selection procedures as equally fair (van den Bos, Vermunt, & Wilke, 1997). The authors interpreted this result as suggesting that procedural and distributive-justice concerns are most influential in the absence of outcome information. When outcomes were favorable, individuals demonstrated less concern over procedural and distributive deficiencies. Relevant to AA, support for outcomes (e.g., increasing organizational diversity) can override justice-based opposition.

Specific to AA attitudes, one study supported the proposition that valuation of diversity promoted support for AA in general, and for tiebreak and banding policies (Aberson & Haag, 2003). Similarly, college students who participated in diversity-related campus activities showed positive changes in their attitudes toward AA (Aberson, in press). The authors interpreted these outcomes as evidence that valuing diversity focused individuals on AA outcomes; namely, increases in diversity. Given that opposition to AA relates to procedural (e.g., fairness) and distributive-justice (e.g., merit) concerns, and fairness heuristic theory indicates that such concerns may be overridden by a focus on outcomes, beliefs in the value of diversity may serve a promising role in promoting support for AA.

As outlined previously, I conceptualize diversity valuation as related to a focus on policy outcomes. However, outcome focus does not mean that people who believe in the benefits of increasing diversity necessarily support any policy that promotes diversity. In the work described earlier examining reactions to softer preference policies, each policy achieved goals of increasing diversity through the hiring of qualified African American applicants. However, when considering stronger and potentially illegal preferences, other outcome concerns may offset the value of diversity as an outcome. For example, a policy promoting the hiring of nonqualified minority candidates may increase organizational diversity, but such hiring ultimately could serve as an argument against AA, as employing unqualified workers hurts organizations. Similarly, race-blind policies that ignore ethnic differences among candidates are procedurally and distributively justified, but may be opposed by those who value diversity, as the policy may fail to promote diversity.

Hypothesis 3. Participants who value diversity demonstrate more support for tiebreak, banding, recruitment, and training policies; but less support for race-blind policies.

No predictions are offered for the hiring of nonqualified applicants, hiring less qualified minority applicants, or quotas. Conflicting outcome-related concerns (i.e., increasing diversity vs. a less qualified workforce) likely offset the prediction afforded by diversity beliefs related to these policies.

Prevalence of Discrimination

Belief in the prevalence of discrimination is central to support for AA. Those who do not believe that discrimination exists are less likely to support AA (Jacobson, 1985; Kluegel, 1985; Kravitz & Klineberg, 2000; Kravitz et al., 2000). Specifically, individuals who believe that groups experience discrimination demonstrate more support for AA directed at those groups (Harrison et al., 2006).

Hypothesis 4. Participants who believe more strongly in the prevalence of discrimination demonstrate more support for each policy.

Personal self-interest. Individuals who believe they can benefit from AA support AA more than those who do not perceive benefit (Aberson, 2003; Kravitz, 1995; Summers, 1995). Whites often perceive less direct benefit from AA than do minorities in terms of increases in job opportunities but they can see benefits in terms of job satisfaction and general happiness with these benefits related to greater support for AA (Aberson, 2003). As with fairness beliefs, the present study defined self-interest in terms of on perceptions of how AA would impact the respondent in combination with how strongly participants associated policies with AA.

Hypothesis 5. Personal self-interest will relate positively to support for all policy actions. This relationship exists only to the extent that the participant views an action as typical of AA.

Political Orientation

Liberals support AA more than do conservatives (Harrison et al., 2006; Sidanius, Pratto, & Bobo, 1996).

Hypothesis 6. Liberals will support all policy actions more than will nonliberals.

Sex

There is considerable evidence that women support AAPs more than do men (e.g., Harrison et al., 2006; Kravitz & Platania, 1993). The focus of this study is race-based policies, so sex is not expected to impact policy support. Analyses include sex in order to provide information about the relationship between sex and support for race-based policies.

Method

Participants were 212 White undergraduates who were enrolled at a state university (68%) and a community college (32%) and who participated for course credit or extra credit. The sample was predominantly female (75%; 160 female, 52 male) and traditional college age ($Mdn = 20$; 76% between 18 and 24 years).

Procedure

Participants at the state university completed a questionnaire on paper. Participants at the community college used an Internet-based instrument. Although I refer throughout the following sections to paper and Internet samples, the samples differed in one other manner. The paper sample was entirely anonymous, whereas Internet sample participants provided their names to allow for deletion of duplicate entries. These participants were informed that their names would be removed prior to examination of data. Instructions and order of items were identical for both samples.

Instructions informed participants that they would answer general questions about AA and then read and evaluate descriptions of several AAPs. Instructions also indicated that the goal of the research was to gain an understanding of the factors related to support for and opposition to AA, as well as perceptions of the typical features of AA. Further instructions indicated that participants should focus on their opinions about policies affecting minority applicants, rather than policies targeting women.

Participants first completed measures of self-interest, fairness, merit, diversity, and discrimination. Next, participants read that they would be responding to questions examining their perceptions of how AA works and the rules governing AA. After reading each policy, participants were asked to evaluate how typical the policy characteristics were of AA and their level of support for a policy that included this feature. Policies were always presented in the same order. Finally, participants completed the demographic items.

Policy Ratings

Participants read short descriptions of eight different hiring policies (see Appendix A for descriptions, which are presented in the order experienced by participants). They rated their support on an 11-point scale ranging from 0 (*do not support at all*) to 10 (*support completely*), and how typical they viewed

each policy to be of AA. The latter item was rated on an 11-point scale ranging from 0 (*not at all common*) to 10 (*typical of most policies*).

There are five descriptions that involved preferences, including some extreme and potentially illegal applications. These descriptions are the use of quotas and required hiring of unqualified applicants; hiring less qualified minority applicants; use of ethnicity as a tiebreaker; and banding strategies wherein applicants are placed in qualification bands (e.g., highly qualified or moderately qualified, with minority applicants given preference within each band).⁵ The remaining descriptions portrayed training, recruitment, and race-blind actions.

Predictor Variables

Participants indicated agreement with items regarding fairness of AA, endorsement of the merit principle, and value of diversity on a 7-point scale ranging from 1 (*do not agree at all*) to 7 (*agree a lot*; Aberson & Haag, 2003). The fairness scale (four items; $\alpha = .86$) includes questions such as "Affirmative action gives an unfair advantage to minority groups."

Fairness and the typicality ratings for each policy were centered on their means and then multiplied together (Aiken & West, 1991). The eight variables that were created using this procedure comprised the fairness measures used in regression analyses. The reasoning for this is that fairness of AA is relevant only to the extent that any specific action is seen as representative of AA. This was necessary, as the fairness items focused on fairness of AA in general, not the fairness of a specific policy action.

The endorsement of merit principle measure (three items; $\alpha = .76$) includes questions such as "People should be hired based exclusively on ability." The diversity valuation scale (four items; $\alpha = .64$) includes questions such as "Employers benefit from diversification of historically segregated jobs," but produced mediocre reliability. Belief in the prevalence of discrimination measure was a single item asking "How much of a problem is racial discrimination in hiring decisions in the United States (currently)?" The item was rated on a 7-point scale ranging from 1 (*not a problem*) to 7 (*a big problem*).

A single item measured personal self-interest. This item asked respondents to indicate how much they felt they could benefit from AA in the future. This was rated on a 7-point scale ranging from 1 (*not at all*) to 7 (*a lot*). As

⁵The banding policy used here deviates from suggested uses that employ numeric labels for bands. The description of banding should be taken only as representative of a soft preference application, but not as an actual policy.

with the fairness variables, this item was centered and then multiplied by the typicality rating for the policy of interest. This approach was necessary because beliefs about the self-interest impacts of AA are relevant to evaluations of policies only insofar as the participant associated the policy with AA.

One item asked participants to indicate their political orientation (*liberal, conservative, middle of the road, or other*). Those respondents who classified themselves as liberal were compared to all others in the regression analysis (0 = *not liberal*, 1 = *liberal*). Sex also was comprised of a single item (0 = *men*, 1 = *women*).

Results

Data Screening, Assumptions, and Analysis Strategy

Both the merit and diversity scales were negatively skewed. Reflected square root transformations remedied this problem. To retain interpretability, I switched the direction of the relationship when presenting results involving these variables. All other variables met normality assumptions. Examinations of residuals for regression analyses did not reveal problems with non-normality, nonlinearity, or heteroscedascity, nor did diagnostics reveal problems with multicollinearity (Tabachnick & Fidell, 2001).

Predictors of Support for Each Policy

In this section, I present the results for predictors of support for each of the eight policy actions. Presentation is by predictor variable to highlight the value of predictors across applications. Appendix B presents means, standard deviations, and correlations between the 29 variables. Table 1 presents regression analyses and correlations predicting support for each policy action.

Fairness of affirmative action. For each analysis, fairness was multiplied by the typicality rating for that policy, producing an index that addressed beliefs about the fairness of AA and the association of the specific policy with AA. Partially consistent with Hypothesis 1, stronger scores on the fairness index related to more support for policies involving quotas, hiring less qualified minority applicants, tiebreakers, and race-blind policies.

Countering predictions, fairness did not predict support for the hiring of nonqualified minorities. This likely reflects a floor effect, as a result of the low level of support for this application ($M = 1.3$ out of a possible 10). Fairness was unrelated to banding, recruitment, and training in the regression analyses, but fairness significantly correlated with banding in the predicted direction.

Table 1
Regression Analyses and Zero-Order Correlations Predicting Support for Each Policy

	Hire NQ ^b		Hire LQ ^b		Tiebreak ^a		Quota ^a		Banding ^c		Recruit ^a		Training ^c		Race-blind ^a	
	B	r	β	r	β	r	β	r	β	r	β	r	β	r	β	r
Fair	.03	.33**	.30**	.33**	.13*	.22**	.20**	.27**	.12	.26**	-.01	.05	-.11	-.02	.20**	.23**
Merit	-.22**	-.25**	-.26**	-.35**	-.40**	-.52**	-.29**	-.40**	-.21**	-.38**	-.10	-.30**	-.02	.14*	.20**	.23**
Diversity	-.01	.11	.02	.17*	.19**	.39**	.15*	.29**	.26**	.42**	.36**	.49**	.24**	.31**	-.17*	-.25**
Discrimination	.13	.19**	.05	.19**	.14*	.34**	.08	.29**	.19**	.37**	.20**	.38**	.13	.24**	-.03	-.16**
Self-interest	.16*	.19**	-.04	.09	.08	.13*	.13*	.20**	.09	.22**	.04	.09	.12	.09	-.02	.04
Liberality	-.07	.07	.11	.25**	.03	.28**	.08	.25**	.03	.26**	.08	.28**	.05	.18*	.10	-.02
Sex	-.01	-.01	.00	.01	-.04	-.07	.07	.09	-.08	-.08	-.04	-.01	.06	.07	-.01	.03
R ²	.11**	.22**	.22**	.37**	.37**	.33**	.29**	.29**	.33**	.31**	.31**	.13**	.13**	.14**	.14**	.14**
Support	M = 1.27 _a	M = 2.57 _b	M = 2.88 _b	M = 3.80 _c	M = 3.80 _c	M = 4.09 _c	M = 6.23 _d	M = 6.23 _d	M = 4.09 _c	M = 6.23 _d	M = 6.42 _d	M = 8.06 _e	M = 6.42 _d	M = 8.06 _e	M = 6.42 _d	M = 8.06 _e
Typical	M = 4.96 _{ab}	M = 5.20 _{ac}	M = 6.37 _d	M = 6.25 _{de}	M = 6.25 _{de}	M = 5.60 _{ac}	M = 5.61 _{ac}	M = 5.61 _{ac}	M = 5.60 _{ac}	M = 5.61 _{ac}	M = 5.25 _{ac}	M = 4.29 _b	M = 5.25 _{ac}	M = 4.29 _b	M = 5.25 _{ac}	M = 4.29 _b

Note. Hire NQ = hire not qualified African American; Hire LQ = hire less qualified African American. Within each row, means with different subscripts differ significantly. ^adf = 7, 194. ^bdf = 7, 192. ^cdf = 7, 193. Degrees of freedom differ because of missing data. *p < .05. **p < .01.

Endorsement of the merit principle. Stronger endorsement of the merit principle predicted opposition to preferences and support for the race-blind procedure. Hypothesis 2 predicted the relationship between merit and support for strong preferences and race-blind approaches; but relationships with tiebreakers, banding, recruitment, and training were not specifically hypothesized. Stronger endorsement of the merit principle predicted opposition to any policy in which criteria other than merit decided hiring or recruitment and support for the policies that removed ethnicity from decisions or sought to improve the qualifications of minority applicants.

Valuation of diversity. Diversity results were fully consistent with Hypothesis 3. Stronger belief in the value of diversity related to greater support for banding, tiebreakers, recruitment, and training, and to opposition of race-blind policies. Valuing diversity unexpectedly predicted support for quotas and for hiring less qualified minority applicants.

Prevalence of discrimination. Supporting Hypothesis 4, belief in the prevalence of discrimination predicted support for each policy, except for the race-blind policy. Perception of discrimination was associated with opposition to race-blind approaches. Although discrimination did not significantly predict support for many of the policies in the regression analyses, perceptions of the prevalence of discrimination produced significant zero-order correlations with all of the policies.

Personal self-interest, liberality, and sex. Hypotheses 5 and 6 received mixed support. Personal self-interest, liberality, and sex generally fared poorly in the regression analyses, but a number of significant correlations existed. Self-interest—measured as interest multiplied by typicality—related to support for quotas, hiring unqualified applicants, tiebreakers, and quotas. Liberality related to support for all policies except hiring nonqualified applicants and race-blind approaches.

Comparisons of and Across Samples

Several analyses compared demographic and methodological variables between data collected using paper and Internet surveys to address the comparability of the samples. The samples did not differ in terms of socioeconomic status, $\chi^2(3, N = 212) = 2.69, p = .49, V = .11$; or sex, $\chi^2(1, N = 212) = 0.63, p = .43, V = .05$; but did differ on political affiliation, $\chi^2(3, N = 212) = 7.64, p = .05, V = .19$; and age, $t(200) = 3.64, p < .001, d = 0.56$.

The Internet sample ($M = 26.1$) was older than the paper sample ($M = 21.9$). This is not surprising, given the populations served by each campus. The Internet sample included more individuals without a political party affiliation (40.3% vs. 23.5%), which is possibly a product of the age differences.

To examine differences in missing data patterns, completion rates on the support variables and predictors were examined. I classified each participant as having either no missing data on any of the relevant variables or missing data on at least one variable. Missing rates were consistent across paper (6.3%) and Internet (9.0%) samples, $\chi^2(1, N = 212) = 0.45, p = .50, V = .05$.

To address potential interactions between data-collection method and predictor variables, each of the regression analyses described was performed with seven interaction variables. Each variable represented the interaction between sample (paper or Internet) and the seven predictor variables. Only 5 out of 56 of these interaction terms were significant (9%), with no one term being significant across more than two policies. The consistency across measures suggests that the type of survey method employed did not meaningfully impact results. Based on these results, it does not appear that the data-collection techniques or sample differences impacted results.

Comparison of Policies

A series of paired *t* tests examined differences between actions on support and typicality. Both sets of analyses involved 28 comparisons. To account for inflation of familywise Type I error, a Bonferonni correction was applied so that only probability values below an adjusted two-tailed alpha value of .0018 (.05/28) were judged to be statistically significant. Table 1 summarizes these comparisons.

For support, the only pairs that did not significantly differ were recruitment and training; tiebreakers and hiring less qualified minority applicants; and quota and banding.⁶ Significantly different pairs produced effect sizes ranging from $d = 0.32$ to 1.25. The overall effect size based on repeated-measures ANOVA for these eight policies was $\eta^2 = .48$. Not surprisingly, preferences ($M = 2.91$) generally received less support than did actions not involving preferences ($M = 6.90$), $t(205) = 25.27, p < .001, d = 1.76$. Among the preference procedures, banding and quotas received the most support.

The range of typicality rating means (4.29 to 6.37) was far smaller than support ratings (1.28 to 8.06). Participants viewed tiebreaker and quota policies as most typical of AA. Only 16 of the pairs differed significantly on typicality. Significantly different pairs produced effect sizes ranging from $d = 0.18$ to 0.41 with an overall effect size across policies of $\eta^2 = .08$.

⁶Conclusions regarding quotas should be tempered, as the policy description may have confounded race with the policy. The quota policy specifically mentioned African Americans as an example. No other policies mentioned a specific ethnic group.

Discussion

The present study examined the relationship between fairness of AA, endorsement of the merit principle, valuation of diversity, perceptions of the prevalence of discrimination, self-interest, liberality, and sex to support for a series of actions associated with AA policies. Perhaps the most important finding of the study was that widely supported predictors of attitudes toward AA in general demonstrated differential predictive power across AAPs. In some cases, items associated with support for one type of policy related to opposition to other policies. Variables that consistently predicted support for AA in other studies did not necessarily relate to support for specific policies.

These results suggest that past research focusing on attitudes toward AA in general or self-defined AAPs may not inform reactions to some actual AAPs. However, this work also demonstrated that beliefs about the fairness of AA in general can color evaluations of individual policies when those policies are judged to be representative of AA and that beliefs regarding merit, diversity, and discrimination impact support for certain policies.

Impact of Predictors Across Policies

Fairness results were partially consistent with predictions. Individuals who viewed AA as unfair and policies typical of AA opposed quotas, hiring less qualified minority applicants, tiebreakers, banding, and race-blind approaches. This relationship was, however, absent for some policy actions. For the hiring of nonqualified applicants, this was not surprising. Most participants did not support this policy, regardless of how they felt about the fairness of AA in general. Regarding recruitment and training policies, the absence of a relationship between fairness and support is encouraging, as it suggests that beliefs about AA in general may not be a barrier to support for these approaches.

Endorsement of the merit principle predicted opposition to all policies involving preferences or recruitment and support for race-blind and training approaches. As merit reflects one aspect of distributive-justice concerns, opposition likely indicates apprehension over using factors other than qualifications to make decisions. Unexpectedly, merit beliefs also related to opposition to softer preferences, such as those promoting use of ethnicity to choose among equal or comparable applicants. These are more common forms of AA than are hard preferences, albeit not particularly common compared to recruitment policies, so merit-based opposition is a problem for organizations implementing such policies.

Belief in the merit principle presents challenges for preference and recruitment policies. It appears that individuals who endorse merit believe that it is

always possible to rank applicants based exclusively on qualifications. This belief assumes the existence of perfectly reliable and valid procedures to identify applicants and to choose between them. Also of note is the fact that belief in the merit principle was associated with support for race-blind policies. This suggests that participants who believe in merit may also believe that ignoring ethnicity in decision making is effective. Training results were encouraging, as participants who believed more strongly in merit supported the approach that improved minority applicant qualifications.

Diversity valuation proved to be one of the most consistent predictors of policy support in the model. Greater diversity valuation related to more support for all policy actions, except hiring nonqualified minority applicants and race-blind approaches. Like merit results, diversity valuation effects reversed when examining support for race-blind policies.

Participants who believe diversity is valuable to organizations may see race-blind approaches as ineffective. Those policies that diversity failed to predict were stronger and potentially illegal applications. Interestingly, diversity valuation predicted support for quotas. This may result from the strong association of quotas with AA. Since participants rated quotas as typical of AA ($M = 6.2$ out of 10), many participants with stronger diversity beliefs may view quotas as central to AA.

Beliefs about the prevalence of discrimination related to support for soft preferences, but not to other policies in the regression analyses. However, zero-order correlations revealed significant relationships between discrimination and all of the policies, a result that is consistent with Harrison et al. (2006). Perceptions of discrimination related more strongly to support for moderate forms of AA than for strong preferences or weaker policies.

Personal self-interest only predicted support for quotas, hiring nonqualified applicants, tiebreakers, and banding. However, it is important to note that this study focused on the responses of Whites, so perceived self-interest from AA was relatively low overall. Despite this limited sample, White respondents opposed AAPs when they associated the policy with AA in general and thought that AA in general would hurt them. In addition, these results are consistent with data indicating that the impact of self-interest is stronger for more prescriptive policies (Harrison et al., 2006).

Neither liberality nor sex was a significant predictor in the regression analyses. However, liberality related to support for most AAPs when examining zero-order correlations, meaning that liberality was a useful predictor in the absence of information about other beliefs. Although others found that women support AA more than do men (Harrison et al., 2006), sex was unrelated to support for any policy, likely because participants evaluated race-based policies.

Support and Typicality Ratings

Support and typicality results provided information regarding the types of actions that participants found most objectionable, as well as perceptions of how AA works. Not surprisingly, policy actions that involved preferences received less support than those that did not involve preferences. Among preference policies, banding received the most support (except when compared to quotas). These results are consistent with procedural and distributive-justice interpretations. Preferences can produce perceptions of procedural and distributive injustice, leading to less support for these policies. In the case of banding, it may be that extensive justification for the policy (i.e., a longer policy statement) reduced some perceptions of justice-based violations, resulting in higher support ratings. Results for recruitment and training were encouraging, as these were among the most strongly supported approaches.

Typicality ratings provided less clear interpretations. The range of typicality ratings was much smaller than that found for support ratings. Participants rated tiebreaker and quotas as most typical of AA. This is interesting as quotas are not legal under current AA laws. Similarly, recruitment received moderate typicality ratings, whereas recruitment is among the most common AAP presented.

In conjunction with the narrow range of typicality ratings, the results suggest a lack of participant knowledge of what is and what is not AA. Regardless of accuracy of knowledge, high typicality ratings for quotas potentially explain unexpected results regarding that policy. Quotas were strongly associated with AA, so participants who supported AA may support quotas because they mistakenly believed quotas to be typical of AAPs. This, however, is not inconsistent with survey data indicating that more than 40% of participants defined AA as a quota system (Golden et al., 2001) and earlier work in which participants identified quotas among the most likely components of AAPs (Kravitz & Platania, 1993). Indeed, according to Edley (1996), "The single most pernicious popular misunderstanding about affirmative action is that it means quotas" (p. 18).

Increasing Support for AAPs

Beliefs more consistently predicted policy support than did individual characteristics, so this section focuses on beliefs. Fairness results suggest that participants who viewed AA as unfair and associated AAPs with AA were less supportive of preference policies. This finding suggests that

fairness-based opposition is most relevant for policies that lack procedural justification.⁷

For each of the preference policies, minority status impacted hiring decisions, creating a procedural-justice violation. One path to increasing support for AAPs is providing detailed information regarding procedures. For example, an organization that utilized procedures involving applicant testing could emphasize the procedurally justified aspects of the selection procedure, such as the logic behind testing measures (e.g., Truxillo & Bauer, 1999).

Given evidence that the public does not fully understand AA and that opposition to AA results in part from this misunderstanding (e.g., Crosby, 1994; Eberhardt & Fiske, 1994), providing procedural details is an important avenue for increasing support for preferences. Consistent with this, the present study's banding policy was among the most strongly supported preference policies. Additionally, organizations using recruitment or training policies will benefit from highlighting the procedurally just aspects of these policies. This approach might also serve to disassociate their policies from assumptions about the use of preferences.

Regarding endorsement of the merit principle, organizations may limit distributive-justice concerns by highlighting the selection of qualified applicants as a strategy to improve support for the policy. However, changing individual beliefs about merit is a difficult task because of misconceptions regarding accuracy of the measurement of qualifications. Given these issues, attempts to convince individuals that AAPs (e.g., banding) that define groups of scores as equal do not violate merit principles is a difficult task. Of course, a complete understanding of such issues requires training in measurement and statistics. Influencing merit beliefs may not be a viable strategy for widespread attitude change in this case.

The role of diversity valuation is encouraging as these beliefs are potentially more malleable than fairness or merit beliefs. Previous work demonstrated that justifying policies in terms of increasing organizational diversity promoted policy support (e.g., Harrison et al., 2006; Murrell, Dietz-Uhler, Dovidio, Gaertner, & Drout, 1994). Fairness heuristic theory suggests that this form of justification reduces concerns based on procedural and distributive-justice violations by focusing on desirable outcomes, such as increasing diversity. Specifically related to policy support, the current study adds to data supporting the role of diversity valuation in increasing support

⁷It is unclear whether participants viewed training and recruitment as procedurally justified. Participants might view these policies as expanding the pool of qualified candidates by adding more qualified minority candidates, thus decreasing the likelihood of hiring a White candidate. However, a procedural-justice violation of this sort is less obvious than those found in preference policies.

for a range of policy applications, as well as AA in general (e.g., Aberson & Haag, 2003).

The most common race-based AAP included in this study was minority recruitment, so I end this section with a discussion of how organizations might increase support for this approach. Participants who valued diversity and believed discrimination against minorities persisted were more supportive of recruitment, suggesting that highlighting diversity and discrimination issues in policy descriptions may promote policy acceptance. Similarly, others demonstrated that justifying policies in terms of redressing past discrimination and increasing organizational diversity increased support for policies (Harrison et al., 2006; Matheson, Warren, Foster, & Painter, 2000).

The current results might be interpreted as indicating that individuals who endorsed the benefits of diversity and recognized the prevalence of discrimination brought their own justifications for these policies. However, it is possible that these beliefs will impact the effectiveness of policy justifications. For example, if an individual does not believe that African Americans are targets of employment discrimination, then that individual would be unlikely to change his or her attitude about a policy based on justification focused on redressing discrimination. Individuals with beliefs that correspond to justifications, or possibly neutral beliefs, may be more influenced by justifications. This suggests that organizations interested in enhancing support for recruitment policies might need to provide stronger justifications (e.g., information about the history of employment discrimination, highlighting the benefits of diversity to their organization) for their policies than those presented in previous work.

Limitations

Ethnicity, social class, and age are important predictors of AA attitudes (e.g., Kravitz & Klineberg, 2000; Kravitz et al., 2000). The homogeneity of the current sample made inclusion of these items unfeasible. Also, of concern are the single-item measures of support for each AAP and for several predictors and the mediocre reliability of the diversity valuation measure.

The most obvious limitation to this study is reliance on a college student sample. AA concerns can be salient to students, as many of them experienced competitive college admission procedures, but their knowledge of workplace AA may differ from a more general population. Given the results regarding typicality of policies, it is clear that this sample did not possess a deep understanding of AA.

The results of the current study broadly support the role of beliefs about fairness, merit, the value of diversity to organizations, and discrimination as

predictors of support for AAPs. Belief in benefits to organizations resulting from diversity and discrimination predicted support for most of the AAPs presented in this study, even some involving strong preferences. However, for many policies in which diversity belief related to support, merit and fairness beliefs exerted opposing effects, predicting opposition among participants with stronger beliefs in meritocracy. For example, diversity and discrimination beliefs predicted support for soft preferences, but opposition to race-blind approaches; whereas stronger endorsement of the merit principle and fairness perceptions predicted opposition to most preferences, but support for race-blind approaches. Most prominently, these results suggest that past research focusing on general attitudes toward AA without reference to specific policies may not generalize to attitudes toward specific policy applications.

References

- Aberson, C. L. (2003). Support for race-based affirmative action: Self-interest and procedural justice. *Journal of Applied Social Psychology, 33*, 1212–1225.
- Aberson, C. L. (in press). Diversity experiences predict changes in attitudes toward affirmative action. *Cultural Diversity and Ethnic Minority Psychology*.
- Aberson, C. L., & Haag, S. C. (2003). Beliefs about affirmative action and diversity and their relationship to support for hiring policies. *Analyses of Social Issues and Public Policy, 3*, 121–138.
- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267–299). New York: Academic Press.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Bobocel, D. R., Son Hing, L. S., Davey, L. M., Stanley, D. J., & Zanna, M. P. (1998). Justice-based opposition to social policies: Is it genuine? *Journal of Personality and Social Psychology, 75*, 653–669.
- Crosby, F. J. (1994). Understanding affirmative action. *Basic and Applied Social Psychology, 15*, 13–41.
- Crosby, F. J., Iyer, A., Clayton, S., & Downing, R. A. (2003). Affirmative action: Psychological data and the policy debates. *American Psychologist, 58*, 93–115.
- Eberhardt, J. L., & Fiske, S. T. (1994). Affirmative action in theory and practice: Issues of power, ambiguity, and gender versus race. *Basic and Applied Social Psychology, 15*, 201–220.

- Edley, C., Jr. (1996). *Not all Black and White: Affirmative action and American values*. New York: Hill & Wang.
- Garcia, L. T., Erskine, N., Hawn, K., & Casmay, S. R. (1981). The effect of affirmative action on attributions about minority group members. *Journal of Personality, 49*, 427–437.
- Golden, H., Hinkle, S., & Crosby, F. (2001). Reactions to affirmative action: Substance and semantics. *Journal of Applied Social Psychology, 31*, 73–88.
- Harrison, D. A., Kravitz, D. A., Mayer, D. M., Leslie, L. M., & Lev-Arey, D. (2006). Understanding attitudes toward affirmative action programs in employment: Addressing reactions to redressing discrimination. *Journal of Applied Psychology, 91*, 1013–1036.
- Heilman, M. E., Battle, W. S., Keller, C. E., & Lee, R. A. (1998). Type of affirmative action policy: A determinant of reactions to sex-based preferential selection? *Journal of Applied Psychology, 83*, 190–205.
- Heilman, M. E., Block, C. J., & Lucas, J. A. (1992). Presumed incompetent? Stigmatization and affirmative action efforts. *Journal of Applied Psychology, 77*, 536–544.
- Jacobson, C. K. (1985). Resistance to affirmative action: Self-interest or racism. *Journal of Conflict Resolution, 29*, 306–329.
- Kluegel, J. R. (1985). “If there isn’t a problem, you don’t need a solution”: The bases of contemporary affirmative action attitudes. *American Behavioral Scientist, 28*, 761–784.
- Kravitz, D. A. (1995). Attitudes toward affirmative action plans directed at Blacks: Effects of plan and individual differences. *Journal of Applied Social Psychology, 25*, 2192–2220.
- Kravitz, D. A., Harrison, D. A., Turner, M. E., Levine, E. L., Brannick, M. T., Denning, D. L., et al. (1997). *Affirmative action: A review of psychological and behavioral research*. Bowling Green, OH: Society for Industrial and Organizational Psychology.
- Kravitz, D. A., & Klineberg, S. L. (2000). Reactions to two versions of affirmative action among Whites, Blacks, and Hispanics. *Journal of Applied Psychology, 85*, 597–611.
- Kravitz, D. A., Klineberg, S. L., Avery, D. R., Nguyen, A. K., Lund, C., & Fu, E. J. (2000). Attitudes toward affirmative action: Correlations with demographic variables and with beliefs about targets, actions, and economic effects. *Journal of Applied Social Psychology, 30*, 1109–1136.
- Kravitz, D. A., & Platania, J. (1993). Attitudes and beliefs about affirmative action: Effects of target and of respondent sex and ethnicity. *Journal of Applied Psychology, 78*, 928–938.
- Matheson, K. J., Warren, K. L., Foster, M. D., & Painter, C. (2000). Reactions to affirmative action: Seeking the bases for resistance. *Journal of Applied Social Psychology, 30*, 1013–1038.

- Murrell, A. J., Dietz-Uhler, B., Dovidio, J., Gaertner, S., & Drout, C. (1994). Aversive racism and resistance to affirmative action: Perceptions of justice are not necessarily color blind. *Basic and Applied Social Psychology, 15*, 71–86.
- Nacoste, R. W. (1987). But do they care about fairness? The dynamics of preferential treatment and minority interest. *Basic and Applied Social Psychology, 8*, 177–191.
- Plous, S. (1996). Ten myths about affirmative action. *Journal of Social Issues, 52*(4), 25–31.
- Plous, S. (2003). Ten myths about affirmative action. In S. Plous (Ed.), *Understanding prejudice and discrimination* (pp. 206–212). New York: McGraw-Hill.
- Sidanius, J., Pratto, F., & Bobo, L. (1996). Racism, conservatism, affirmative action, and intellectual sophistication: A matter of principled conservatism or group dominance? *Journal of Personality and Social Psychology, 70*, 476–490.
- Spann, G. A. (2000). *The law of affirmative action: Twenty-five years of Supreme Court decisions on race and remedies*. New York: New York University Press.
- Stephanopoulos, G., & Edley, C., Jr. (1995). *Affirmative action review: Report to the President*. Washington, DC: U.S. Government Printing Office.
- Summers, R. J. (1995). Attitudes toward different methods of affirmative action. *Journal of Applied Social Psychology, 25*, 1090–1104.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston: Allyn and Bacon.
- Taylor-Carter, M. A., Doverspike, D., & Alexander, R. (1995). Message effects on the perceptions of the fairness of gender-based affirmative action: A cognitive response theory-based analysis. *Social Justice Research, 8*, 285–303.
- Thibaut, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Lawrence Erlbaum.
- Truxillo, D. M., & Bauer, T. N. (1999). Applicant reactions to test score banding in entry-level and promotional contexts. *Journal of Applied Psychology, 84*, 322–339.
- van den Bos, K., Vermunt, R., & Wilke, H. A. M. (1997). Procedural and distributive justice: What is fair depends more on what comes first than on what comes next. *Journal of Personality and Social Psychology, 72*, 95–104.
- van den Bos, K., Wilke, H. A. M., Lind, E. A., & Vermunt, R. (1998). Evaluating outcomes by means of the fair process effect: Evidence for different processes in fairness and satisfaction judgments. *Journal of Personality and Social Psychology, 74*, 1493–1503.

Appendix A

Descriptions of Affirmative Action Policies

Quota. A quota system that specifies hiring of a certain number of employees of each ethnicity (e.g., hire 20% African American employees).

Hiring nonqualified. Hiring of employees who are not qualified, in order to meet AA goals.

Tiebreak. Use of ethnicity as a “tiebreaker” to decide between equally qualified candidates (e.g., if two candidates are equally qualified, the minority candidate is offered the job).

Race-blind. Race-blind procedures where no information about a job applicant’s race is seen by decision makers.

Recruitment. Active recruitment of minority applicants (e.g., managers recruit at schools with large minority populations).

Training. Training programs designed to improve minority interviewing and job skills. After completion of the training program, graduates are expected to apply for jobs within the company.

Hiring less qualified. Minority applicants hired instead of better qualified White applicants unless the White applicant is much better qualified than the minority applicant.

Banding. Use of aptitude tests to classify candidates as qualified or not qualified. From within the qualified group, candidates are placed into “bands” of highly qualified, moderately qualified, and barely qualified groups. Job offers are first made to minority applicants in the highly qualified group, then nonminority applicants in the same group. If the position is not filled after use of this procedure, offers are made in the following order until the position is filled: minority applicants from the moderately qualified group, nonminorities from the moderately qualified group, minority applicants from the barely qualified group, nonminorities from the barely qualified group.

Appendix B

Means and Correlations for All Items

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. Quota	3.8	2.8	—										
2. Hiring NQ	1.3	1.9	.35	—									
3. Hire LQ	2.6	2.5	.37	.34	—								
4. Tiebreaker	2.9	3.0	.51	.22	.33	—							
5. Banding	4.1	2.8	.52	.21	.38	.58	—						
6. Recruit.	6.2	3.0	.38	.04	.22	.41	.46	—					
7. Training	6.4	2.8	.26	-.06	-.05	.30	.25	.51	—				
8. Race-blind	8.1	2.6	-.09	-.23	-.13	-.18	-.10	-.02	.01	—			
9. Fair quota	-2.0	14.9	.28	.07	.13	.05	.14	.04	-.04	-.08	—		
10. Fair NQ	-4.7	16.4	.17	.03	.12	.00	.06	.09	.02	.06	.32	—	
11. Fair LQ	-5.2	16.6	.19	.11	.35	.13	.18	.20	.13	-.05	.26	.47	—
12. Fair tie	-3.0	15.5	.23	.15	.25	.23	.20	-.01	.03	-.03	.28	.24	.32
13. Fair band	-2.8	16.5	.18	.08	.22	.17	.27	.06	.06	-.03	.29	.33	.49
14. Fair recr.	1.4	16.7	.04	.02	.19	.11	.11	.08	.08	-.02	-.06	.12	.32
15. Fair train.	0.9	15.2	.03	.00	.17	.07	.07	.07	.00	-.04	.02	.09	.25
16. Fair blind	3.0	18.8	-.15	-.16	-.06	-.04	-.07	-.09	.01	.26	-.08	-.10	-.17
17. Merit	5.7	1.3	-.40	-.25	-.34	-.52	-.37	-.29	-.13	.22	-.04	.03	-.10
18. Diversity	5.4	1.0	.30	.10	.20	.40	.44	.50	.29	-.24	.04	.02	.11
19. Discrim.	4.8	1.4	.29	.19	.20	.36	.38	.40	.23	-.10	.18	.05	.16
20. SI quota	-0.1	4.3	.21	.10	.14	.11	.10	-.02	.06	.08	.26	.08	.25
21. SI NQ	0.0	4.7	.28	.18	.26	.19	.20	.12	.11	.07	.09	.31	.36
22. SI LQ	-0.9	4.6	.13	-.03	.13	.02	.11	.18	.16	.12	.25	.31	.44
23. SI tie	-0.5	4.1	.16	.07	.17	.13	.16	.03	-.02	.05	.28	.23	.16
24. SI band	0.1	4.5	.23	-.02	.12	.13	.22	.12	.08	.17	.25	.20	.30
25. SI recr.	0.0	4.4	.03	-.05	.00	.11	.10	.13	.22	-.05	.07	.17	.21
26. SI train.	0.7	5.5	.12	-.08	.01	.10	.11	.07	.11	-.04	.19	.14	.12
27. SI blind	0.4	0.5	.04	.05	.06	.04	.06	-.04	-.07	.06	.10	-.04	.03
28. Liberality		42%	.22	.06	.23	.26	.26	.27	.18	-.04	.01	.11	.11
29. Sex		75%	.09	.00	.02	-.09	-.07	.00	.07	.00	.10	.02	.07

Note. Sample sizes range from 202 to 212 for correlations. Correlations with absolute values > .14 are significant at $p < .05$, two-tailed. Decimals are omitted from correlation values. Means for merit and diversity represent untransformed values expressed on a 7-point (1–7) scale, but correlations for these variables use transformed data. NQ = not qualified; LQ = less qualified; SI = personal self-interest. Items 1–8 are support measures for each policy; items 6–16 are fairness indexes for each policy; and items 20–27 are self-interest indexes for each policy. Correlations may differ from Table 1 because of missing data.

Appendix B *Continued*

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

—																
52	—															
15	33	—														
11	22	65	—													
-04	-05	07	20	—												
-11	-07	-05	-03	04	—											
13	15	07	00	-14	-31	—										
11	15	05	16	-13	-25	37	—									
26	23	06	19	08	-08	-05	08	—								
24	19	14	13	-08	-07	07	15	45	—							
14	27	20	13	02	01	04	08	13	26	—						
46	31	07	15	04	-14	05	08	34	21	20	—					
31	56	15	18	08	-12	06	10	25	19	34	36	—				
07	16	43	35	04	-08	02	10	-09	-07	25	16	40	—			
13	16	32	43	22	-01	-01	07	09	06	13	06	33	58	—		
04	10	03	21	38	-12	01	08	05	06	-09	07	30	28	37	—	
11	12	15	12	09	-35	27	27	-07	08	03	04	15	21	16	10	—
-07	-08	02	20	08	11	04	05	06	02	07	08	03	14	09	06	06
