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This study used scores on measures of dispositional optimism and pessimism to discriminate 117 extreme Type A versus 131 extreme Type B college undergraduates. Consistent with *a priori* hypotheses the analysis revealed that Type As were significantly less pessimistic, and significantly more optimistic, than Type Bs.

Previous theorists and researchers have explored the antecedents and consequences of Type A behavior (TAB), which is characterized by a pervasive achievement orientation, hard-driving competitiveness, speed-impatience, and hostility in response to threat to personal control over salient outcomes; and they have contrasted it with its counterpart Type B behavior, which is characterized by a relaxed, easy-going orientation and lower levels of competitiveness, impatience, and hostility.[1,2] Supporting the notion that TAB is adaptive at younger ages, researchers have found that Type As set higher self-standards for performance[3], achieve greater success in school[4] and attain higher occupational status.[5,6] In addition, young Type As, relative to young Type Bs, report higher levels of happiness, life satisfaction, value fulfillment, and self-confidence.[7,8] These greater levels of subjective adjustment among Type As suggest that they would report higher dispositional optimism and lower dispositional pessimism, relative to Type Bs.

Prior research investigating measures of TAB, pessimism and optimism used multiple regression analysis to examine the interaction between different facets of TAB—such as task focus, speed/impatience, and aggression—and optimism/pessimism on coping behavior, quality of work performance, and psychological well-being.[9-12] However, the classification agreement between different questionnaire measures of TAB[13] and the gold-standard measure of TAB—the Structured Interview[14], increases when increasingly extreme questionnaire scores are used.[15-17] Accordingly, the present study compared scores on optimism and pessimism—assessed using the same measures as prior research, between groups of extreme Type As and Type Bs.

The sample was drawn from a large pool of college undergraduates completing a questionnaire battery.[18,19] TAB was assessed via the short form of the Jenkins Activity Survey for Students.[20-25] In order to maximize the reliability of assignments into A/B categories, normative

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guidelines[26] were followed to obtain an analysis sample consisting of 131 extreme Type B and 117 extreme Type A undergraduates. Scores on measures of dispositional pessimism and optimism were obtained via the Life Orientation Test.[27,28] Table 1 presents descriptive statistics for the latter subscales separately by A/B Type.

Table 1: Descriptive Statistics for Pessimism and Optimism Subscales, by A/B Type

Subscale	A/B Type	Mean	SD	Median
Pessimism	B	6.7	2.94	6
	A	5.9	3.53	5
Optimism	B	9.2	2.82	9
	A	9.8	3.07	10

Note: $N_{Type\ A}$=117, $N_{Type\ B}$=131. SD=standard deviation.

Univariate Analysis. UniODA statistical analysis[29-31] was conducted using MegaODA software[32-34] to assess independent associations between subscales and A/B Type.[35]

For *optimism* a statistically significant, ecologically weak[29] effect emerged (p<0.05, ESS=13.3), which was stable in jackknife validity analysis (p<0.03). The UniODA model was: if optimism$\leq$10.5 (61st percentile in the sample), then predict Type B; otherwise predict Type A. This model reveals that the Type Bs had significantly lower optimism scores when compared to the Type As. The model correctly classified 67% of the Type Bs, and 46% of the Type As. The model was correct 58% of the time a prediction of Type B was made, and 56% of the time a prediction of Type A was made.

For *pessimism* a statistically significant, ecologically weak effect emerged (p<0.005, ESS=18.4), which was stable in jackknife validity analysis (p<0.002). The UniODA model was: if pessimism$\leq$4.5 (34th percentile in the sample), then predict Type A; otherwise predict Type B. This model reveals that the Type As had significantly lower pessimism scores compared to the Type Bs. The model correctly classified 75% of the Type Bs, and 44% of the Type As. The model was correct 60% of the time a prediction of Type B was made, and 61% of the time a prediction of Type A was made.

Multivariate Analysis. Automated classification tree analysis[36,37] (CTA) was conducted to discriminate A/B Types using pessimism and optimism subscale scores as attributes (gender was included as a potential attribute). Only the same pessimism effect which was identified in univariate analysis emerged: no multivariable model was possible for these data.

Confirming *a priori* hypotheses, Type Bs had marginally lower optimism scores and significantly higher pessimism scores than Type As. Type Bs' greater pessimism represents a generalized tendency to expect the worst and not to count on good things happening. This negative future orientation may not only undermine Type Bs' motivation to persist in the face of failure, but may also make them less likely to tackle difficult challenges in the first place. Higher dispositional pessimism may also reinforce lower levels of self-confidence and weaken future morale, further compromising the subjective well-being of Type Bs.

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