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Everyday Interactions with University Authorities: Authority Treatment Quality, Outcome Favorability and First-Year Students' University Adjustment

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Abstract

Two hundred and twelve first-year undergraduates completed an authority interaction checklist every time they had a (self-defined) meaningful interaction with university authorities during the first two weeks of their first semester. Students' degree of university identification before they began the term moderated the influence of campus authorities' treatment quality on academic engagement three months later. These longitudinal data provide support for the argument that people who identify with the group the authority represents will interpret the authority's behavior as indicative of their value to the group.

Keywords

college experiences; event contingent design; group authorities; group value model; social identity

Surveys and laboratory experiments document the importance of authority treatment quality to group members' cooperation and engagement (Tyler & Blader, 2000; Tyler, Boeckmann, Smith, & Huo, 1997; Tyler & Lind, 1992; van den Bos et al., 2005). When people feel they have been fairly treated, they report greater organizational commitment (Folger & Konovsky, 1989; Moorman, 1991), greater acceptance of (unfavorable) decisions (Huo, Smith, Tyler, & Lind, 1996), better job performance (Lind, Kanfer, & Earley, 1990), and more positive emotions (Weiss, Suckow, & Cropanzano, 1999).

According to the group value model (Tyler, Degoey, & Smith, 1996), authority treatment quality communicates symbolic information to people about their value to the group that the authority represents. When authorities treat people fairly, they communicate status and importance but when authorities treat people unfairly, they communicate marginality and

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exclusion. This information shapes people's feelings about themselves and their behavior on behalf of the group. However, treatment quality should only influence self-evaluations and behavior if people care about the group the authority represents. If people do not care about the group the authority represents, suggestions of marginality or exclusion should be less potent.

Although previous research supports the group value model (Huo et al., 1996; Smith, Thomas, & Tyler, 2006; Tyler et al., 1997), these data are based on people's reactions to a single authority and focused on either evaluations of a single event or general opinions. People's reactions to a single unfair event may be quite different from their reactions to a series of unfair events. For example, Branscombe, Schmitt, and Harvey (1999) show that attributing a negative outcome to discrimination may be self-protective for a single (unstable) event but detrimental to self-esteem over the long term (if prejudice and discrimination are perceived as stable aspects of one's environment). Similarly, fair treatment from an ingroup authority might encourage the acceptance of one unfavorable outcome but not the acceptance of many unfavorable outcomes. An authority's respectful treatment might encourage people's willingness to accept that authority's decision but it is not clear to what extent the experience will shape people's general attitudes and behavior toward the larger organization several months later. Only data collected about multiple authorities and over time can resolve these questions.

In this study, we asked first-year undergraduates to complete a one-page authority interaction checklist every time they had a (self-defined) meaningful interaction with university authorities during the first two weeks of their first semester. Participants also completed a survey before they arrived on campus and a second survey at the end of their first semester. With this design, we could determine whether initial levels of university identification and students' early experiences on campus shaped their attitudes and reported behavior at the end of the semester. Using an event-contingent approach to study authority interactions can reduce possible retrospective biases that can undermine conclusions drawn from cross-sectional data while maintaining a level of ecological validity that is difficult to create within a laboratory (for discussions, see Bolger, Davis, & Eshkol, 2003; Reis & Gable, 2000). As far as we know, this is the first project that records participants' interactions with authorities in a field context over time.

Reactions to authorities

A review of the social psychological literature suggests two sources of information that shape people's reactions to group authorities (Colquitt & Greenberg, 2003; Haslam, 2001; Tyler & Blader, 2000). First, we often care about the amount and quality of the resources that we receive from other people, groups and group authorities (Taylor & Moghaddam, 1994; Thibaut & Kelly, 1959). Laboratory, field and survey studies show that outcome fairness and favorability are consistently related to task motivation and performance (see Greenberg, 2003; Tyler et al., 1997 for reviews). Assessments of outcome favorability, outcome fairness, as well as direct and indirect control over procedures predict pay satisfaction, organizational commitment, job satisfaction and evaluations of leaders and managers (Colquitt & Greenberg, 2003). Research also suggests that people will comply with authorities, at least publicly, when the rewards outweigh the costs (see Turner, 2005, for a review). Finally, descriptions of successful or effective leadership almost always mention the ability to reward subordinates (Greenberg, 2003). Subordinates who feel that their leaders offer them valuable resources and opportunities work harder and perform more effectively than subordinates who feel their leaders deny them resources and opportunities (Haslam, 2001). Therefore, we hypothesize that students who report more favorable outcomes during their first two weeks on campus will report more academic engagement at the end of the first term.

Second, because we are motivated to seek ongoing, secure relationships with other people and groups (Baumeister & Leary, 1995; Fiske, 2004), we should be sensitive to any information about our value or place within important groups that authorities might communicate (Lind & Tyler, 1988; Tyler & Lind, 1992). Models of power suggest that people often comply because they want to gain approval from (important) others or find the group particularly attractive (Turner, 2005). Finally, many discussions of effective leadership link increased subordinate motivation and performance to the leader's ability to consult with subordinates and treat them with consideration and respect (Haslam, 2001; Hogg & Martin, 2003). Therefore, we hypothesize that students who report more respectful authority treatment during their first two weeks on campus will report more academic engagement at the end of the first term.

Numerous studies also show evidence for an interaction between distributive justice (including outcome favorability) and procedural justice (including treatment quality) judgments on people's attitudes and behavior (Brockner et al., 2003). For example, authority treatment quality more strongly predicts people's attitudes and behavior when outcomes are unfavorable in comparison to when outcomes are favorable (Brockner et al., 2003). Therefore, we also explore whether the interaction between authority treatment quality and outcome favorability predicts students' subsequent academic engagement.

Group identification as a moderator

We predict that the relative importance of authority treatment quality depends upon whether people identify with the group that the authority represents (Tyler et al., 1997; see Platow, Wenzel, & Nolan, 2003, for a similar argument). Because authorities represent the group, people typically see authority behavior as indicating the views of the entire group (Haslam & Platow, 2001). In particular, authority treatment symbolizes whether the group respects the person (Smith et al., 2006; Tyler et al., 1997). Respect is a psychological construct that captures people's views of their personal value to the group (Ellemers, Doosje, & Spears, 2004; Simon & Stürmer, 2003). Therefore, we expect judgments about whether one is respected by other group members to mediate the influence of authority treatment quality on group-related attitudes and behavior but only for people who view the group as important to them. For example, among employees who identified more strongly with a concrete construction company, the quality of supervisor treatment predicted employees' feelings of respect and personal self-efficacy. Further, feeling respected by their colleagues mediated the relationship between fair treatment by a single supervisor and self-efficacy for these employees (Smith et al., 2006). These relationships did not occur for employees who reported identifying less strongly with the company.

If, as we hypothesize, people who identify strongly with the group interpret group authorities' treatment quality as a reaction to their personal value to the group, they should be more likely to view the authority's behavior as a reaction to their personal qualities (see also Leung, Tong & Lind, 2007). In contrast, we hypothesize that people who are not identified with the group should be more likely to view the authority as an outgroup member and the situation as representing an intergroup context (see Ellemers, Spears, & Doosje, 1999; Huo & Tyler, 2001). Rather than attribute the authority's behavior to their personal qualities (and as indicative of ingroup respect), they may attribute the authority's behavior to their (or the authority's) group membership. To explore this possibility, we asked participants to report whether they thought the authority's behavior was caused by their personal qualities, a particular group membership, the authority's group membership or the authority's personal qualities.

If people do not care about the group the authority represents, they should not be interested in any symbolic information (e.g. respect) that authority treatment might communicate. Feeling respected by the campus community should not mediate any relationships between authority

treatment quality and end-of-term outcomes. Instead, less closely identified students may pay more attention to the outcomes they receive. Surveys of employees (Huo & Tyler, 2001; Tyler & Blader, 2000) show that among those who identified more strongly with their work organization, a supervisor's treatment predicted acceptance of a supervisor's decisions. Outcome favorability shaped the opinions of employees who identified less strongly with the organization. Similarly, the willingness of participants in a laboratory experiment (Tyler & Smith, 1999) to help with further studies depended upon how respectfully a graduate student running the study treated them when she represented their university. When the graduate student represented a rival university, participants' willingness to help depended upon outcome favorability.

Research questions

We focus on four outcomes that traditionally are included in procedural justice research: (1) academic engagement (as an indication of performance; Lind et al., 1990); (2) intention to stay (as a proxy for organizational commitment; Folger & Konovsky, 1989); (3) decision acceptance (Huo et al., 1996); and (4) emotional reactions to the interaction (Weiss et al., 1999). We hypothesize that the attitudes and behavior of students who arrive more closely identified with the university will be more closely related to authority treatment quality in comparison to students who arrive less closely identified with the university. We hypothesize that the attitudes and behavior of students who arrive less closely identified with the university will be more closely related to outcome favorability in comparison to students who arrive more closely identified with the university.

We also ask participants to indicate whether they thought unique personal qualities or a particular group membership caused the authority's behavior. We expect students who identify more closely with the university to be more likely to interpret campus authority behavior as a reaction to their personal qualities (and be indicative of ingroup respect). For these students, feeling respected by the campus community should mediate any relationships between authority treatment quality and end-of-term outcomes. We expect students who identify less closely with the university to view their interactions in intergroup terms and be more likely to view authority behavior as a product of various groups' memberships. For these students, feeling respected by the campus community should not mediate any relationships between authority treatment quality and end-of-term outcomes.

Finally, we explore whether any effects that we find can be explained by initial differences in students' expectations for authority behavior. One could argue that organization identification is simply a proxy for expectations about authority behavior (Platow, Reid, & Andrew, 1998). Students who arrive more identified with the university may expect and look for campus authorities to treat them well (and be less concerned with any single good or bad outcome). Students who arrive less identified with the university may expect and look for campus authorities to give them poor outcomes (and be much more sensitive to outcome favorability).

Method

Research design

We recruited newly admitted students to the university during the summer orientations that take place before students begin the school year. Each participant completed the first questionnaire at home (and returned it by mail) or on campus. When students returned for the fall semester, we met with them individually or in small groups, and explained the short one-page checklist that they should complete every time they interacted with a university authority for the first two weeks of the semester (see the Appendix for copy of the checklist). We asked participants to complete the checklist every time they had a 'meaningful' interaction with an

authority. As examples, we mentioned asking someone a series of information questions, paying a bill, trying to get into a class, setting up an email account or getting help with solving a conflict. We told them that it was their perception of ‘meaningful’ that mattered, and it did not require that they and the other person had a long conversation, that they met that person more than one time or that they even knew the authority’s name. We defined an authority as anyone who represented the university in some way and had some power in relation to them but we also told participants that it was their definition of authority that was important. We asked participants to carry a booklet containing several copies of the one-page checklist with them and to complete it as soon as possible after a relevant interaction. At the end of the two weeks, each participant met with a research assistant to return his or her booklet and discuss the experience. At the end of the first semester, participants completed a second questionnaire.

Participants

We recruited 210 women and 54 men during summer orientations. Eighty percent of the participants recruited during the summer orientation also completed the second two parts of the project. Sixty-two first-year students participated in Fall 2002, 150 first-year students participated in Fall 2003. Of these 37 men and 175 women, 20.3% of the participants identified themselves as members of a minority ethnic group and 16.2% indicated that they were the first in the family to attend college. Twenty-nine participants described themselves as Hispanic, Mexican or Latino, four participants described themselves as African-American, four participants described themselves as ‘mixed race’ and 12 participants described themselves as Asian, Asian-American or Filipino. The participants’ average age was 18.1 years ($SD = 1.67$).¹

Baseline survey

Identification with the university—Participants indicated the extent to which they agreed with eight statements designed to capture their identification with the university (Ellemers, Kortekaas, & Ouwerkerk, 1999; Tyler & Blader, 2000). Statements included:

- I am proud to think of myself as a member of SSU.
- I talk up Sonoma State to my friends as a good university.
- I feel good when people describe me as a typical SSU student.
- When someone asks me what university I will be attending, I wish I did not have to tell them (reverse scored).
- In general, other people respect SSU students.
- People should be glad that they are SSU students.
- Overall, becoming a SSU student has little to do with how I feel about myself (reverse scored).
- Becoming an SSU student is an important reflection of who I am.

Participants indicated their agreement from 1 (disagree strongly) to 5 (agree strongly) ($\alpha = .77$, $M = 3.86$, $SD = 0.57$).

¹Almost all students who did not complete the second two parts of the project did not return to campus for the fall semester. The demographic characteristics of the final sample were not reliably different from the demographic characteristics of the sample that we originally recruited during the summer. Although we did not intend these participants to be a representative sample of the university population, the percentage of women, ethnic majority students and family income reflects the general undergraduate student population (65% female, 82.3% white or ‘unknown’, average family income of \$70,000.000, Sonoma State University Office of Institutional Research, 2003).

Expectations for authority behavior—We asked students to imagine arriving on campus and learning about a mistake in their course schedule, dorm room assignment or student records. We asked students to indicate the extent to which they would expect a staff person to do the following: (1) listen carefully to their opinion; (2) treat them with respect; (3) show concern with their rights; and (4) be honest with them, from 1 (not at all) to 5 (absolutely) ($\alpha = .90$, $M = 4.65$, $SD = 0.75$). We also asked them to indicate to what extent they would expect to leave the discussion satisfied with the outcome ($M = 4.07$, $SD = 1.06$).

'Diary' measures

As soon as they could, participants completed a one-page questionnaire about any experience with a campus authority they found to be meaningful. We asked participants to indicate who the authority was (e.g. professor, resident hall staff, campus security, health center staff) and briefly indicate why they thought the person was an authority. Participants also indicated the authority's gender, approximate age, ethnicity, to what extent the authority could decide what to do and whether they or the authority needed something (see Appendix).

Treatment quality—To measure treatment quality, we combined the answers to four questions (Tyler & Blader, 2000): (1) Did the other person listen carefully to you? (not at all, a little, some, a lot, extremely carefully); (2) Did the other person treat you with respect? (not at all, a little, some, a lot, complete respect); (3) Was the other person honest? (not at all, a little, some, a lot, extremely honest); and (4) Was the other person concerned with your rights? (not at all, a little, some, a lot, extremely concerned) ($\alpha = .91$, M (two-week average) = 4.12, $SD = 0.62$). Thirteen participants reported that their treatment was always of the highest quality.

Outcome favorability—We asked participants to what extent they received what they wanted from not at all, a little, some, a lot, everything. Twenty participants rated every outcome they described as the most favorable (M (two-week average) = 3.81, $SD = 0.82$).

Other measures—For each interaction, we asked participants whether they accepted any decisions made from 1 (not at all) to 5 (completely) ($M = 3.82$, $SD = 0.59$). Participants also indicated how they felt just after the interaction on pairs of adjectives (adapted from Wheeler & Miyake, 1992). The first pair was anchored with 'upset' (−3) and 'calm' (+3), the second pair was anchored with 'angry' (−3) and 'pleased' (+3), the third pair was anchored with 'discouraged' (−3) and 'encouraged' (+3) and the fourth pair was anchored with 'depressed' (−3) and 'happy' (+3). Participants could circle any number on the 7-point scale ($\alpha = .91$, $M = 4.12$, $SD = 0.61$).

We also included four questions designed to measure participants' attributions for the authority's behavior. Participants rated from 1 (not at all) to 5 (completely) the extent to which the behavior of the authority was due to the following: (1) their unique personal qualities ($M = 2.76$, $SD = 1.41$); (2) a group to which they belonged ($M = 2.42$, $SD = 1.61$); (3) the authority's unique personal qualities ($M = 3.15$, $SD = 1.42$); and (4) a group to which the authority belonged ($M = 2.85$, $SD = 1.68$).

Follow-up survey

Intention to stay—Participants' ratings of seven statements were combined as a measure of intention to stay (Tyler & Blader, 2000):

- I would rather attend another university (reverse scored).
- I think about transferring often (reverse scored).
- I will probably look for another university in the next year (reverse scored).

- I regret the decision to come to SSU (reverse scored).
- I like attending SSU.
- At this point, I am staying at SSU more because I have to than because I want to (reverse scored).
- I plan on completing my college education at SSU.

Participants rated each statement from 1 (strongly disagree) to 7 (strongly agree) ($\alpha = .87$, $M = 5.08$, $SD = 1.47$).

Academic engagement—We combined participants' (standardized) ratings of seven descriptions of academic success (Keup & Stolzenberg, 2004): (1) understanding what your professor expect of you academically; (2) developing effective study skills; (3) adjusting to the academic demands of college; (4) managing your time effectively; (5) getting to know faculty; (6) developing closer friendships with other students; and (7) solving registration, IT, customer service or other problems, and eight (standardized) descriptions of academic behavior (Keup & Stolzenberg, 2004): (1) turned in course assignments on time; (2) turned in course assignments late (reverse scored); (3) cheated on a test or paper (reverse scored); (4) came late to class (reverse scored); (5) skipped class (reverse scored); (6) turned in course assignments that did not reflect your best work (reverse scored); (7) missed a deadline set by a professor (reverse scored); and (8) missed a deadline set by the administration (reversed scored). Participants rated their feelings of success from 1 (not at all successful) to 7 (very successful) and how frequently they did each of these things from 1 (not at all) to 5 (often) ($\alpha = .79$, $M = .001$, $SD = 0.54$).

Respect from the campus community—We combined participants' ratings of four statements into a measure of campus community respect (Tyler & Blader, 2000):

- I believe that I make a good impression on other SSU community members (e.g. teachers, staff, students).
- I believe that I have a good reputation among SSU community members (e.g. teachers, staff, students).
- Other SSU community members (e.g. teachers, staff, students) respect me.
- Other SSU community members (e.g. teachers, staff, students) react favorably to what I say and do.

Participants rated their agreement from 1 (disagree strongly) to 7 (agree strongly), $\alpha = .88$, $M = 5.55$, $SD = 0.85$.

Results

Overview

Participants recorded between 0 and 20 interactions with campus authorities ($N = 1390$, $M = 4.55$, $SD = 3.19$). The number of interactions reported by participants was not related to outcome favorability ($r(210) = .02$, $p = .74$), respectful treatment ($r(210) = -.04$, $p = .54$) or university identification ($r(208) = .07$, $p = .35$). Participants described most authorities as male (60.9%), European-American (66%) and between 36 and 60 years old (48.8%).²

'Diary' measures

The first question is whether university identification influenced students' immediate reactions to authority treatment quality or outcome favorability. Because each participant's diary entries

reflected within-person variation and their university identification reflected between-person variation, we utilized Hierarchical Linear Modeling (HLM) to examine predictors of decision acceptance, emotional reactions and attributions for the authority's behavior (Byrk & Raudenbush, 1992). For each outcome, we included university identification (centered around the grand mean) as a person-level predictor. Treatment quality and outcome favorability (centered around the person mean) were included as diary-level predictors (see Table 1).

Decision acceptance—Because participants reported that some campus authorities did not have the power to make a decision, we included authority decision-making power as a predictor. Participants who reported that (1) the authority had more power to make a decision ($\beta = .16$, $SE = .02$, $p < .05$); (2) the authority treatment was more respectful ($\beta = .40$, $SE = .04$, $p < .01$); and (3) their outcomes were more favorable ($\beta = .18$, $SE = .03$, $p < .01$) reported more willingness to accept the authority's decision. The inclusion of these variables led to a better fitting model ($\chi^2(8) = 876.49$, $p < .05$) compared to an intercept-only model and explained 32% of the variance among participants.

Emotional reactions—More university identification ($\beta = .19$, $SE = .08$, $p < .05$), more respectful treatment ($\beta = .77$, $SE = .05$, $p < .01$) and more favorable outcomes ($\beta = .18$, $SE = .03$, $p < .05$) predicted more positive emotional reactions. There was also a reliable three-way interaction among university identification, outcome favorability and treatment quality ($\beta = .14$, $SE = .04$, $p < .05$). To explore this interaction, we used a median split to distinguish more closely and less closely identified participants and for each group, we tested authority treatment quality and outcome favorability as predictors for immediate emotional reactions (Preacher, Curran, & Bauer, 2006). The interaction between outcome favorability and treatment quality remained reliable only for more closely identified participants ($\beta = -.11$, $SE = .03$, $p < .05$). When outcomes were unfavorable, treatment quality more strongly predicted emotional reactions ($\beta = .81$, $p < .01$) in comparison to favorable outcomes ($\beta = .52$, $p < .01$). The inclusion of these variables led to a better fitting model ($\chi^2(7) = 1505.92$, $p < .05$) compared to an intercept-only model and explained 52% of the variance among participants.

Personal qualities as cause for authority treatment—We hypothesized that participants who identified more strongly with the university would be more likely to view authority behavior as caused by their personal qualities. As shown in Table 1, participants who identified more closely with the university ($\beta = .36$, $SE = .15$, $p < .05$) and felt respectfully treated ($\beta = .52$, $SE = .07$, $p < .05$) were more likely to view authority treatment as a reaction to their personal qualities. The inclusion of these variables led to a better fitting model ($\chi^2(8) = 272.96$, $p < .05$) compared to an intercept-only model and explained 17% of the variance among participants.

As shown in Table, 1, participants who reported better treatment attributed their treatment to the authority's personal qualities ($\beta = .32$, $SE = .07$, $p < .01$). However, the effect was qualified by a reliable interaction between treatment quality and outcome favorability ($\beta = .08$, $SE = .04$, $p < .05$). When outcomes were favorable, better treatment was more strongly associated with the authority's personal qualities ($\beta = .43$, $p < .01$). When outcomes were unfavorable, better treatment was less closely related to the authority's personal qualities ($\beta = .21$, $p < .01$).

²Interactions ranged from registration questions, classroom interactions, solving conflicts with roommates to a dorm room fire and dorm room rat infestation. Interactions with office staff (32.2%), resident advisors (25.1%) and professors (32.4%) were the most frequent. We excluded 86 interactions in which the authority was identified as an authority outside the university (e.g. a coffee store manager) or as an older university student who was not acting as a university representative (e.g. a president of a national student organization). Women reported slightly more interactions than men ($r(215) = -.12$, $p = .09$), and majority ethnic background students (e.g. 'white', 'Italian') reported more interactions than did minority ethnic background students ($r(215) = .14$, $p < .05$). Women and majority background participants reported greater academic engagement at the end of the semester. Degrees of freedom differ across analyses because of missing values.

The inclusion of these variables led to a better fitting model ($\chi^2(8) = 256.27, p < .05$) compared to an intercept-only model and explained 7% of the variance among participants.

Group memberships as cause of authority treatment—We hypothesized that participants who identified less strongly with the university would be more likely to view their experiences as the product of different group memberships.³ Participants who arrived less identified with the university were more likely to attribute their treatment to the authority's (occupational) group membership ($\beta = -.52, SE = .20, p < .01$). However, this effect was qualified by a reliable two-way interaction between identification and outcome favorability ($\beta = .23, SE = .09, p < .05$) and a reliable three-way interaction ($\beta = .25, SE = .08, p < .01$). For closely identified participants ($\beta = .16, SE = .05, p < .05$), when outcomes were favorable, better treatment was more likely to be attributed to the authority's (occupational) group membership ($\beta = .34, p = .20$) but when outcomes were unfavorable, the relationship between authority treatment quality and attributions was weaker ($\beta = .10, p = .57$). This interaction was not reliable for less closely identified participants ($\beta = -.05, SE = .07, p = .50$). The inclusion of these variables led to a better fitting model ($\chi^2(8) = 277.66, p < .05$) compared to an intercept-only model and explained 4% of the variance among participants.

Finally, participants who reported better treatment were more likely to view their treatment as a reaction to their (occupational) group membership ($\beta = .17, SE = .08, p < .01$). The inclusion of treatment quality led to a better fitting model ($\chi^2(8) = 379.36, p < .05$) compared to an intercept-only model and explained 5% of the variance among participants.

End-of-term outcomes

The second question is whether students' recorded interactions during the first two weeks of the semester predicted their self-reported attitudes and behavior at the end of the term. We predicted that authority treatment quality would predict academic behavior and attitudes more strongly for participants who reported identifying more closely with the university in comparison to participants who identified less closely with the university. We predicted that outcome favorability might predict academic behavior and attitudes for participants who reported identifying less closely with the university more strongly in comparison to participants who identified more closely with the university. To explore these predictions, we averaged each participant's ratings of treatment quality and outcome favorability across all the interactions that they described (see Table 2). We used participants' mean ratings as predictors in a series of hierarchical multiple regression equations (Aiken & West, 1991; Preacher et al., 2006) with participants' attitudes and behaviors at the end of the semester as the outcome variables.⁴

Academic engagement—As shown in Table 3, participants who arrived more closely identified with the university ($\beta = .24, p < .05$) reported more academic engagement. Further, the regression coefficient for the two-way interaction term between outcome favorability and university identification ($\beta = -.27, p < .05$) and the two-way interaction between treatment quality and university identification ($\beta = .28, p < .05$) were statistically reliable. As shown in Figure 1, when university identification was high, outcome favorability did not predict

³Participants listed a specific authority group membership as the cause of the authority's behavior for 385 interactions. They most frequently listed occupational categories (e.g. 24.4% professors, 30.0% dorm or office staff). Participants listed their own group membership as the cause of authority behavior for 220 interactions. They most frequently listed occupational categories (e.g. 39.8% student, 20.9% dorm resident).

⁴Averaging judgments over the set of interactions most likely increases the correlation between them, but the tolerances listed for the regression equations described below are above .40 (Allison, 1999). According to Allison (1999), the high correlation between authority treatment quality and outcome favorability does not violate statistical assumptions, but it does mean statistically significant differences will be more difficult to detect and small differences in the bivariate relationships will be 'magnified' into larger differences between regression coefficients.

academic engagement ($\beta = .05, p = .72$) but when identification was low, outcomes predict increased academic engagement ($\beta = .45, p < .01$). When university identification was high, better treatment quality predicted increased academic engagement ($\beta = .53, p < .01$), but when identification was low, better treatment quality was not reliably related to academic engagement ($\beta = -.02, p = .87$). The final equation was statistically significant ($F(7, 194) = 3.79, p < .05$), with the seven predictors accounting for 9.3% of the adjusted variance in academic behavior.

Intention to stay at the university—As shown in Table 3, participants who arrived more closely identified with the university ($\beta = .40, p < .05$) reported stronger intentions to stay. This produced a model that explains 12.8% of the adjusted variance in students' intention to stay: $F(7, 184) = 4.93, p < .05$. No other relationships were reliable.

Feel respected by university community—As shown in Table 3, participants who identified with the university ($\beta = .17, p < .05$) felt more respected by the university community. Further, the regression coefficient for the two-way interaction term between outcome favorability and university identification ($\beta = -.26, p < .05$) and the two-way interaction between treatment quality and university identification ($\beta = .25, p < .05$) were statistically significant. As shown in Figure 2, when university identification was high, outcome favorability was not reliably related to respect ($\beta = -.08, p = .72$) but when identification was low, better outcomes strongly predicted more respect ($\beta = .58, p < .01$). When university identification was high, better treatment quality predicted increased feelings of respect ($\beta = .60, p < .05$), but when identification was low, better treatment quality was not reliably related to respect ($\beta = -.10, p = .33$). The final equation was statistically significant ($F(7, 184) = 3.88, p < .05$), with the seven predictors accounting for 9.6% of the adjusted variance in feeling respected.

Feeling respected as a mediator—We argue that if people identify closely with a group, they view the group authority's treatment as indicative of their personal value or respect from the larger group. Therefore, we explored whether feeling respected by the university community mediated the relationship between perceptions of treatment quality and academic engagement.

To test our argument for mediated moderation (Muller, Judd, & Yzerbyt, 2005), we included feelings of respect and a term representing the interaction between feeling respected and university identification as a final step in a regression equation predicting academic engagement. Feeling respected ($\beta = .40, p < .05$) and the interaction term ($\beta = .13, p < .05$) reliably predicted additional variance in academic success (the final equation explains 24.1% of the adjusted variance). Further, the coefficient associated with the interaction term representing the product of university identification and treatment quality drops from .79 to .46 in the final equation (and is no longer statistically reliable).

Simple effects tests (Muller et al., 2005) show that among high identifiers, authority treatment quality is reliably associated with academic engagement ($\beta = .45, p < .05$). Further, when feeling respected is included in the equation for predicting academic engagement, the regression coefficient for the path between authority treatment quality and academic engagement becomes statistically non-significant ($\beta = .25, p = .11$). Feeling respected remains statistically significantly related to academic engagement ($\beta = .53, p < .05$). A Sobel test indicates that the indirect path from authority treatment quality to academic engagement is reliably different from zero ($z = 2.15, p < .05$). Among low identifiers, authority treatment quality is not reliably related to feeling respected ($\beta = -.11, p = .47$).

Expectations for authority behavior

These data illustrate the predictive value of university identification, but perhaps the degree to which participants identified with the university is simply a proxy for their (positive) expectations about how university authorities will behave. Therefore, we explored the extent to which participants' expectations about authority behavior could explain the relationship between university identification and university adjustment.

Expectations that campus authorities would treat them respectfully were related to reports of more favorable outcomes ($r(198) = .19, p < .05$), better treatment ($r(198) = .28, p < .05$) and university identification ($r(198) = .22, p < .05$). Expectations that campus authorities would provide more satisfying outcomes also were related to reports of more favorable outcomes ($r(198) = .17, p < .05$), better treatment ($r(198) = .18, p < .05$) and university identification ($r(198) = .13, p = .08$). However, if we control for outcome expectations, university identification remains reliably related to academic engagement ($r(210) = .28, p < .05$), intention to stay ($r(210) = .36, p < .05$) and feeling respected ($r(210) = .23, p < .05$). If we control for treatment expectations, university identification remains reliably related to academic engagement ($r(210) = .31, p < .05$), intention to stay ($r(210) = .38, p < .05$) and feeling respected ($r(210) = .24, p < .05$).

We also included expectations for authority behavior in the regression equations described above. There was only one case in which the effect for expectations was close to reliable. Participants who expected more favorable outcomes reported feeling more respected by the university community ($\beta = .18, p = .07$). However, the inclusion of this variable did not reliably improve the predictive value of the regression equation, nor did it change the reliability of the other predictors.

Discussion

First-year students who reported better authority treatment also were more likely to report that they accepted decisions, felt better and attributed authority behavior to their personal qualities. First-year students who viewed their outcomes as favorable were more likely to report that they accepted decisions and felt better. For closely identified participants, authority treatment quality also was associated with stronger emotional reactions when outcomes were unfavorable, supporting the interaction patterns documented in other research (Brockner et al., 2001).

However, the most consistent predictor of students' reactions was university identification. Higher university identification predicted reports of more positive academic engagement, intention to stay and greater feelings of respect from the community three months later and more positive emotions just after an authority interaction. Most importantly, the influence of authority treatment quality and outcome favorability on end-of-term adjustment was moderated by students' degree of university identification. For students who arrived more closely identified with the university, respectful treatment from campus authorities during their first two weeks predicted their academic engagement and feelings of respect three months later. For these students, feeling respected by the university community mediated the relationship between authority treatment quality and academic engagement. Data from the authority checklists suggest that more closely identified students viewed authority behavior as a reaction to their personal qualities whereas less closely identified students may have viewed respectful authority behavior as an occupational requirement and not a reflection of their personal value to the community. For these students, favorable outcomes during the first two weeks predicted their academic engagement and feelings of respect three months later.

Our results contribute to a rich research tradition documenting attitude and behavioral differences between high and low identifiers (see Ellemers, Spears, & Doosje, 1999, for a review) and suggest how identification with an organization before one arrives can shape subsequent attitudes and behavior. Further, organizational identification is not simply a proxy for people's expectations for how organizational authorities will behave. Even when we controlled for students' expectations, the same patterns emerged. Of course, it is important to remember that students, unlike employees or members of other organizations, have tremendous choice in what classes to take, where to live and who to see (Nathan, 2005). Therefore, students' interpretations of their early experiences may be reinforced more frequently in comparison to new members of other kinds of organizations (see Sidanius, Van Laar, Levin, & Sinclair, 2004; van den Bos et al., 2005).

One question for future research is whether more and less closely identified students inhabit different 'social worlds'. Most first-year students spend their time with similarly situated (and demographically similar) peers (Keup & Stolzenberg, 2004; Nathan, 2005). If students turn to their peers for help in interpreting their experiences, their initial sensitivities may be substantiated (see Tyler et al., 1997). Even if both treatment quality and outcome favorability shape students' immediate reactions, over time, one or the other may become more meaningful if other people support the tendency to frame interactions in particular ways (Haslam, O'Brien, Jetten, Vormedal, & Penna, 2005). For example, authority treatment quality during the first two weeks did not predict feelings of community respect for less closely identified students. However, feeling respected still was related to intention to stay for these students. We suspect that participants' 'construction' of university community may not have included many of the campus authorities with whom they interacted at the beginning of the term.

Of course, it is important to remember that this is not a representative sample of university students, nor did these students randomly select the interactions they reported. They may have reported their most 'juicy' interactions, created situations to rate or neglected some circumstances. However, the exit interviews combined with the wide range and variety of interactions reported by participants suggest how seriously participants took the project. It is also important to recognize that university identification did not moderate the relative importance of treatment quality and outcome favorability to decision acceptance and immediate emotional reactions to students' experiences with campus authorities in the first two weeks. The absence of reliable interactions may reflect the large amount of variance already accounted for by the main effects of treatment quality and outcome favorability.

Finally, there may also be other predictors that shaped participants' experiences that we did not include in our models. Perhaps students who arrived more closely identified with the university have different temperaments or personalities in comparison to students who arrive less closely identified with the university. Still, the patterns remain the same even when we account for differences in gender, ethnic background, initial expectations for authority behavior, initial self-efficacy and initial ratings of personal values.⁵ Further, in two different experiments, Blader (2007) manipulated participants' levels of university identification and showed that university identification influenced participants' ratings of fair treatment when no procedural information was given.

We also cannot be sure what led to university identification *before* students arrived on campus. Female participants and those who reported lower family incomes reported higher university identification in comparison to male participants and those who reported higher family incomes. Still, when we control for gender and family income, university identification continues to predict university adjustment. We also could find no evidence to suggest that

⁵For further details about these analyses, please contact the author. We thank a reviewer for this observation.

students interpreted identification with this university as identification with general academic achievement (42% of participants reported choosing this university because of its geographic location and 24% reported choosing this university because of its size). Perhaps the degree of students' university identification reflects information that students heard from family and friends, the university's reputation or status in comparison to other universities that they considered, or even their assessment of the first few letters that they received from the university. All these possibilities require further research.

Regardless of the limitations, we think the general pattern is quite clear. Across multiple interactions and multiple authorities, university identification shaped participants' sensitivities to their early experiences. Moreover, respectful treatment, particularly for students less closely identified with the university, did not compensate for unfavorable outcomes during the first two weeks. We think this is an important lesson to remember as budgetary pressures force university administrators to move toward larger class sizes, fewer office staff, fewer faculty and advisors—leading, we would argue, to the increased likelihood that students will not get what they want or need from campus authorities. One might suggest that if universities could increase students' initial identification, respectful authority treatment would compensate for less favorable outcomes. However, it is important to remember that the mean level of university identification across all our participants was high (3.86 on a 5-point scale). In other words, it is not that the 'low' identifiers did not feel connected to the university; they just did not feel as connected as did the 'high' identifiers. There may be limits to how much more university identification can be increased.

Most models of academic achievement and university engagement focus on individual student characteristics, motivations or experiences within the classroom (Keup & Stolzenberg, 2004; Robbins et al., 2004). Our approach offers a broader framework for understanding university adjustment. It allowed us to explore how students' experiences inside *and* outside the classroom shape their adjustment. As powerful as classroom and residence hall experiences might be for students, our data show the extent to which university adjustment is shaped by more routine interactions with admissions, health center, office and academic staff. It is the general patterns across authority interactions that count. Everyone in the academy matters.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Figure 1.

Predicted academic engagement as a function of university identification, authority treatment quality and outcome favorability.

Figure 2.
Predicted feelings of respect as a function of university identification, authority treatment quality and outcome favorability.

Table 1

Unstandardized parameter estimates from the HLM analyses

Variable	Intercept	University ID	Treatment quality (TQ)	Outcome favorability (OF)	ID × TQ	ID × OF	TQ × OF	ID × TQ × OF
Accept decision	3.41	.08 (.07)	.40 (.04)**	.18 (.03)**	-.14 (.08)	.01 (.05)	.01 (.02)	-.03 (.04)
Positive emotional reaction	5.61	.19 (.08)*	.77 (.05)**	.44 (.03)**	-.21 (.09)	.09 (.06)	-.02 (.02)	-.14 (.04)**
Authority treatment due to:								
my personal qualities	2.75	.36 (.15)*	.52 (.07)**	.03 (.05)	-.09 (.12)	-.01 (.08)	.06 (.03)	-.10 (.06)
my group	2.25	-.23 (.19)	.17 (.08)*	.05 (.06)	.28 (.14)	-.01 (.09)	.05 (.04)	.14 (.07)
authority's personal qualities	3.08	.01 (.17)	.32 (.07)**	.08 (.05)	.12 (.13)	.04 (.08)	.08 (.04)*	.05 (.06)
authority's group	2.67	-.52 (.20)**	.11 (.09)	.07 (.06)	.07 (.15)	.23 (.09)*	.05 (.04)	.25 (.08)**

Note: Numbers in parentheses are the standard errors for the parameter estimates. All intercepts are reliably different from zero. All models fit the data significantly better than an intercept only model. The model predicting decision acceptance also includes an estimate for the authority's ability to make a decision ($B = 16$, $SE = .02$, $p < .01$).

* $p < .05$;
** $p < .01$.

Table 2

Means, standard deviations and correlations

Variable	M	SD	1	2	3	4	5	6	7
1. University identification	3.86	0.57	—	—	—	—	—	—	—
2. Outcome favorability	3.81	0.82	.14	—	—	—	—	—	—
3. Treatment quality	4.12	0.62	.18*	.74**	—	—	—	—	—
4. Academic engagement	−0.001	0.54	.30**	.11	.09	—	—	—	—
5. Intention to stay	5.08	1.47	.39**	.14	.15	.30**	.18*	—	—
6. Feel respected	5.55	0.85	.24*	.22*	.20*	.50**	.25**	—	—
7. Expected respectful treatment	4.65	0.75	.23*	.20*	.29**	.04	.02	.09	—
8. Expected good outcomes	4.07	1.06	.22*	.26*	.25**	.09	.04	.19*	.63**

Note: $n = 188$. Entries are Pearson correlations. Low scores indicate less identification with the university, less respectful treatment, less favorable outcomes, less academic engagement, less likely to stay and less respect. The means for respectful treatment and outcome favorability represent the average rating over the two weeks of recorded interactions.

*
 $p < .05$;

**
 $p < .01$.

Table 3
University identification, authority treatment and outcomes as predictors of university adjustment

Academic engagement			Plan to stay		Feel respected	
Predictors	β	Adj R^2	β	Adj R^2	β	Adj R^2
Step 1		7.9%		14.0%		8.7%
University identification (A)	.24*		.40**		.17*	
Treatment quality (B)	-.02		.07		.15	
Outcome favorability (C)	.11		.12		.08	
Step 2		9.3%		12.8%		9.6%
A $\times$ B	.28*		-.08		.25*	
A $\times$ C	-.27*		-.01		-.26*	
B $\times$ C	.10		-.04		.03	
A $\times$ B $\times$ C	.08		-.04		.04	

Note: $n = 188$. Higher scores indicate more identification, better treatment, better outcomes, more academic engagement, intention to stay, and feeling more respected by the campus community.

+ $p < .10$;

*
 $p < .05$;

**
 $p < .01$.