Motivation and performance in teams: Transforming loafing into resonance *

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Abstract

Employee responses to being placed in workplace "teams" range from free-riding (shirking, social loafing) to working harder than ever before, and feelings of identity (or in-group) with the team may play a key role in facilitating the working harder response. Fifty-two Australian future managers worked on a workplace simulation task, either (a) alone (Control), (b) among a simulated unidentified aggregate of other students (team setting, no social identity), (c) with simulated other students from the same faculty competing against the Faculty of Law (in-group, social identity condition), or (d) amid a simulated out-group of students from Law, competing against the participant's own faculty (out-group condition, pre-existing conflicting loyalty condition). As predicted, compared to (a) working alone, aggregation (b) resulted in free-riding, which was reversed by merely invoking (c) a social (faculty) identity, but then re-appeared under (d) an out-group condition. Tentative though the current data may be, "flip-over" effects like these may depend on a worker's pluralistic mix of individualistic and collectivistic repertoires. To the extent that such pluralism is found throughout Australia and elsewhere in the South Pacific (Taylor & S. Yavalanavanua, 1997), our findings may apply to 'thinking through' workplace team development elsewhere in the region.

Around the globe, social scientists in general, and management scientists in particular, are searching for ways to transform organisational groups into cohesive and effective workplace *teams* (Wageman, 1997). This is proving difficult, because reactions to being placed into work aggregates range from free-riding, or "social loafing" (Ringelmann, 1913), to performing beyond one's personal best (Triplett, 1898). Relatively recent cross-cultural research has found that cultural context can determine whether loafing or working harder becomes dominant (Earley, 1993). Earley found that simulating a workplace team task resulted in loafing when the cultural context was predominantly individualistic (among "Western" managers), but improved performance when it was collectivistic (among "Eastern" managers). A consistency in this study is that the presence of others may have facilitated the expression of dominant cultural (and, as Earley showed, personal) value orientations, either individualistic or collectivistic respectively (Zajonc, 1965).

Social Identity theory goes further still (Tajfel, 1978). It argues that all of us are individualistic and collectivistic by turns, depending on the particular social context prevailing at the time (Kagitçibasi, 1994). Even the most rampant individualist, it advocates, can be influenced to behave collectivistically, thereby becoming a team player (Tajfel, 1982). All that is required is that (s)he is led to categorise him- or herself as a member of some discrete in-group (Colling, 1992), however trivial or nominal the basis for that grouping may be (Tajfel, 1970). Tajfel has consistently

argued that people are pre-primed to adopt even nominal social identities that are suggested to them, because they have a fundamental need to belong to groups, and to feel good about that membership by out-performing their comparable rivals.

This theory implies that it should be relatively easy to instil team camaraderie, *even in employees who are comparatively individualistic* (Carr, 1998). The present study therefore tests whether invoking a relatively nominal social identity, in a teamwork situation, will be sufficient to facilitate improved performance rather than social loafing. The study takes place in a comparatively individualistic - Australian - setting (Hofstede, 1980).

Collectivistic orientations can also reportedly work against team cohesion, in particular if there are pre-existing loyalties toward other groups and factions *outside* the current one (Triandis, 1988). Such arguably derogatory claims have tended to be made in regard to relatively collectivistic, and to so-called "developing" countries (Triandis, McCusker, & Hui, 1990). The present study, however, tests whether they will subtend in a relatively individualistic, and so-called "developed," Australian setting, where the rhetoric of workplace teams is arguably rife (see also, Carr, Ehiobuche, Rugimbana, & Munro, 1996; and, Earley, 1993).

Method

Participants

A convenience sample of 52, first-, second-, and third-year Social Science students from the Northern Territory University, in Darwin, Australia. There were 28 females and 24 males, ranging in age from 18 to 45 years. Gender and discipline of study were counter-balanced across conditions. The first-year students participated as part of their course requirements rather than out of personal interest, but all participants took part on the basis of informed consent and confidentiality. With over sixty ethnic groups in its population (Jurp, McRobbie, & York, 1998), Darwin and its university have one of the most culturally diverse populations in Australia today (Ho, Niles, Penney, & Thomas, 1994). Nonetheless, the town does retain many "Anglo-Celtic" traditions and institutions, which date back to the earlier days of European penal settlement.

Materials.

Undergraduates at the Northern Territory University are aspiring, future managers, and we sought a task whose applied relevance would engage their interest. The task we eventually chose was an "in-basket test" (Frederiksen, 1962). This type of task is common in organisational selection and training, and normally consists of testing managerial prowess via the efficiency with which the applicant processes an in-tray full of everyday managerial tasks (e.g., memos, sick leave requests, security concerns, complaints), against the clock. Earley (1993) has used precisely this type of task in his research.

The task we used had been independently developed by an established management consultancy firm based in Glasgow, Scotland (MacLachlan, 1998). The "Way Ahead In-Tray" was originally centred on the Scottish restaurant business, but for this study its names and places were changed to suit the Australian, Darwinian context (requests to view this detailed instrument and scoring procedures should be sent to Dr. MacLachlan, at Trinity College Dublin). Given that many of Darwin's principal entertainment and hospitality venues are explicitly Anglo-

Celtic in name and concept (see above), the modification was relatively minimal and seamless.

The Way Ahead In-tray measures performance in three key domains: Organising (e.g., "Applies basic principles of time management"); Accountability (e.g., "Clarifies and explains decisions"); and Analysing (e.g., "Prioritises tasks successfully"). Each of these three domains has detailed elements, with clear and structured scoring criteria, which combine to form a scale from 1 to 20 (see Figure 1). In-tray exercises and their psychometric properties are not normally made available for research and publication purposes (Earley could not release his to us, for example). This partly reflects their commercial sensitivity and predictive utility (Gregory, 1996). However, we did have detailed, clear and structured scoring criteria, which normally enhances both reliability and validity (Aamodt, 1999). As a further precaution in the current study, the scoring of individual protocols (performed by Glynn, who was "blind" to actual condition) was rotated through conditions to avoid any systematic scoring bias. According to classical measurement theory, any unreliability in the item/element scoring process would either tend to cancel out during the summation process, or would tend to mask rather than artificially enhance effects between conditions. Between-*group* test comparisons, that is, would tend to be relatively conservative.

Procedure.

Each participant performed the exercise alone, working against the clock over a 45-minute time period. Participants were allocated at random to one of four conditions, two of which were created by invoking pre-existing faculty loyalties (adapted from, James & Greenberg, 1989, see below).

In an "alone" condition, the task was presented as a completely solo performance ("Your results will not be combined with anyone else's, they will be evaluated solely on what you have done at the completion of the task").

In an "aggregated" condition, participants were informed that their results would be evaluated as part of an aggregate of people who had nothing particular in common ("For this study, there are a lot of people carrying out the task, and their results will be combined to give a total score. Your individual performance will not be evaluated").

In an "in-group" condition, participants were informed that, "your results will be combined with those of other Social Science students taking part, and compared to the students taking part from the Law faculty. Your individual performance will not be evaluated." (At the Northern Territory University, there is a some pre-existing rivalry with Law students, and participants in the study appeared to identify readily with the challenge). In other studies, the manipulation has proved sufficient to make salient, in a relatively naturalistic way, social identity and in-group loyalty (see, Tajfel, 1982).

In a final, "out-group" condition, the participants were informed that, "Due to unforeseen circumstances, your results will be combined with the students taking part from the Law faculty. Your individual performance will not be evaluated. The results will be compared to the students from the Social Science faculty taking part in the study."

Across all conditions, a detailed debriefing session indicated that participants largely

took the manipulations at face value. There were two participants who did not take the instructions seriously, and their protocols were subsequently dropped from further consideration.

Results

In all of our analyses, we used the standard SPSS data analysis package. We conducted a one-way Multivariate Analysis of Variance (MANOVA), with condition as the independent variable, and scores in the three theoretically distinct, and relatively content valid domains of the in-tray exercise as dependent variables (Ivancevich & Matteson, 1993; Tabachnick & Fidell, 1996). After testing for MANOVA assumptions, the test indicated significant variation in performance across the four conditions ($\underline{F}[9,43] = 2.88$, $\underline{p} = .004$). Mean performance scores, in each of the four conditions and on each of the three principal domains represented in the test, are presented in Figure 1.
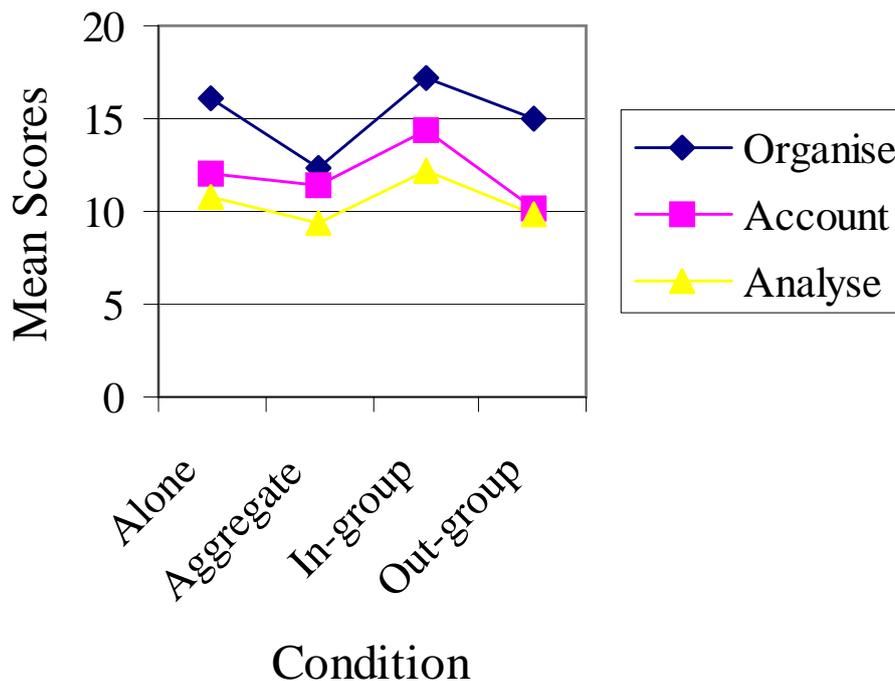

Figure 1
Mean performance scores under varying contextual conditions

From Figure 1, scores on both Organising and Accountability varied significantly across conditions ($F[3,48] = 2.93$, $p =.043$, two-tailed; and $F[3,46] = 5.41$, $p =.003$, two-tailed). Planned comparison *t*-tests were applied to determine *where* the

significant variation occurs in Figure 1. With Bonferroni adjustment over six comparisons, the normal .05 criterion, with the test being directional, is .017. In terms of Organising, participants in the "aggregate" condition performed less well than their counterparts, who believed themselves to be working either "alone" ($t = 2.27$, $p = .016$, one-tailed), or as part of an "in-group" ($t = 3.32$, $p = .002$, one-tailed). In terms of Accountability, there was a significant rise in performance when switching from "aggregate" to "in-group" work conditions ($t = -1.98$, $p = .030$, one-tailed). Figure 1 further illustrates that there was also a significant drop in performance, on Accountability, when crossing from "in-group" to "out-group" conditions ($t = 3.10$, $p = .003$, one-tailed).

Discussion

As expected, both aggregation as well as finding oneself in the "wrong" team (i.e., being placed amongst people with whom one does not normally identify, creating a conflict of loyalty) tended to reduce team performance. Also as expected, working alone, and working with a salient (and task congruent) social identity in mind, tended to improve team performance. Thus, social identity facilitated team-based organisation and accountability, while a context of pre-existing conflicts of loyalty facilitated a drop in accountability, including perhaps team-centred social conscientiousness.

Possibly the most significant finding of the study however is of a more general nature. It consists of the fact that *minimal situational manipulations may have been sufficient, in themselves, to influence social/team orientation and motivation*. To our knowledge, this is the first study to explicitly indicate such a "flip-over" effect within an experimental, workplace simulation (Carr, 1998).

Ideally, our sample size would have been larger, although this is a relatively new field, which small samples can help to open up (Grimm, 1993). Nonetheless, other instruments, with more freely available psychometric properties, could be applied in future studies. In the present study, any scoring noise left over after the cancelling out of random error over items/elements, may have masked treatment effects. In that regard, it needs to be remembered that our study was not aiming to assess individual differences, wherein high reliability and validity would be critical. We were merely testing for differences in mean performance level, between conditions, on the test (a high fidelity workplace simulation).

Our data have therefore tentatively raised the intriguing possibility that a culturally diverse sample, from a relatively pluralistic wider society, has the free capacity to flip over into a more collectivistic, team-oriented mode, *given the appropriate (and thoughtfully invoked and managed) contextual circumstances*. That finding partly converges with data already reported by Taylor and Yavalanavanua (1997), from Fiji. This important study found that either individualistic or collectivistic repertoires could be facilitated in response to a single *social* dilemma, depending on whether the *language* in which the task was administered was modern English or traditional Fijian, respectively. Our own results seem to be indicating a similar outcome with respect to the *organisation* and its *intergroup* context. Managers, our data suggest, might benefit from 'thinking through' questions of identity when attempting to develop workplace teams. The consistency of "flip-over" findings across such culturally and contextually diverse domains may augur well for its robustness (Gergen, 1973). If pluralistic repertoires are to be found throughout the

South Pacific, then the most promising direction for future research may be to explore the flip-over across our region.

Acknowledgements

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