

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503

1. AGENCY USE ONLY (Leave Blank)	2. REPORT DATE 12/16/97	3. REPORT TYPE AND DATES COVERED Announcement	
4. TITLE AND SUBTITLE Effects of Interdependence on Motivation, Inter-Team Interaction Processes, and Performance		5. FUNDING NUMBERS MDA 903-93-K-0016	
6. AUTHOR(S) Cathy Crawford Durham			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) The Maryland Business School University of Maryland College Park, MD 20742		8. PERFORMING ORGANIZATION REPORT NUMBER ARI - 8	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Army Research Institute Office of Basic Research 5001 Eisenhower Avenue Alexandria, VA 22333-5600		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES Dissertation			
12a. DISTRIBUTION/AVAILABILITY STATEMENT Unlimited		12b. DISTRIBUTION CODE	
<div style="border: 2px solid black; padding: 5px; width: fit-content; margin: auto;"> <p>DISTRIBUTION STATEMENT A Approved for public release Distribution Unlimited</p> </div>			
13. ABSTRACT (Maximum 200 words) This dissertation explored the performance effects of task interdependence and pay interdependence at the level of analysis of the "division," defined here as an organizational unit composed of multiple teams. The study also examined relationships among task interdependence, pay interdependence, and 3 variables through which task interdependence and pay interdependence were hypothesized to have their effects on division performance, namely, goal priority (i.e., whether priority was given to division-level goals over team-level goals), inter-team information sharing, and inter-team collaboration. Further, an expanded model was tested that included, in addition to the variables noted above, division efficacy, goal difficulty, and task implementation tactics. In a 3x3 laboratory experiment, 90 divisions composed of 2 3-member teams performed a computer simulation during 2 work sessions, randomly assigned to 1 of 3 levels of task interdependence: independence (teams worked independently of other teams), hybrid interdependence (teams worked somewhat independently and somewhat interdependently), and full interdependence. Divisions also worked under 1 of 3 variable pay structures, in which bonus pay was based on team performance, team and division performance, or			
14. SUBJECT TERMS goals, self-efficacy, incentives, teams, information, communication, cooperation, interdependence		15. NUMBER OF PAGES	
		16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified		18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified
		20. LIMITATION OF ABSTRACT Unlimited	

ABSTRACT (Continued)

division performance.

Results indicated a direct, negative effect of task interdependence on performance, which suggests that the experimental task was easier in the task independence condition. There was no direct effect of pay interdependence on performance, and no interaction between task interdependence and pay interdependence. Pay interdependence affected goal priority, which, in turn, influenced inter-team cooperation. (Inter-team cooperation was a composite variable, formed by combining the variables information sharing and collaboration, because of multicollinearity between the two.) Task interdependence had direct effects on both goal priority and inter-team cooperation. In Session 1 only, inter-team cooperation negatively influenced division performance. In Session 2, however, an interaction was found between task interdependence and inter-team cooperation, so that cooperation had positive performance effects in the task interdependence condition. Goal difficulty, which was negatively affected by task interdependence, had positive effects on performance only in Session 2. Division tactics, which were negatively influenced by task interdependence and positively influenced by both pay interdependence and goal difficulty (in Session 2), had a positive effect on performance.

19980826 051