

**The Relationship of Personality Traits to Satisfaction with the Team:
A Study of Interdisciplinary Teacher Teams
in Rhode Island Middle Schools¹**

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ABSTRACT

Shared practice in schools has emerged; teachers are moving from isolation to team collaboration where personality traits could be related to quality interactions. Team personality traits and team satisfaction were examined. A survey and interview approach was used for $N = 244$ full-time teachers from $N = 49$ interdisciplinary teams at $N = 7$ middle schools. Descriptive, correlational, multiple regression analyses and coded themes about team members' personalities and interactions were employed. No significant relationships were found between the *BFI* traits and Satisfaction with the Team. Team-level analysis indicated a significant negative correlation between Satisfaction with the Team and Extraversion and Agreeableness. Qualitative data revealed team climate, team member personality, and team personality configuration were related to Satisfaction with the Team.

INTRODUCTION

This study examined teacher collaboration, specifically the relationship of teacher team personality traits to an individual team member's satisfaction in working with the team. It investigated the relationship of the *Big Five Inventory (BFI)* personality traits to individual team member satisfaction in $N = 7$ middle schools in Rhode Island where collaborative teams meet in common blocks of planning time that are structured regularly during the school day. It also explored team teachers' personal perspectives about how their own personalities, and the personalities of their teammates, relate to the interpersonal dynamics of the team, and ultimately, their satisfaction with the team.

Statement of the Problem

The use of teams in organizations has increased dramatically over the last half century. Organizations continue to restructure work around teams rather

than individual jobs (Hollenbeck, DeRue, & Guzzo, 2004). Teams have the potential to offer greater adaptability, productivity, and creativity than an individual can offer and they can provide comprehensive and innovative solutions (Salas, Sims, & Burke, 2005).

Given the importance of teams in the workplace, researchers have long been interested in how team members interact with each other. When a group of diverse individuals works together, predictable patterns of behavior, known as group dynamics, develop. Examination of group dynamics focuses on the influence of the individual on the group and the group on the individual (Salas et al., 2005; Sessa & London, 2008; Shani & Lau, 2000). Individual differences, such as personality traits, may influence group interactions. This may involve an individual team member's personality or the mixture of personality traits within the team. Therefore, personality traits may relate to the level of satisfaction team members experience in working with the team (Mason & Griffin, 2003; Peeters, Rutte, van Tuijl, & Reymen, 2006).

One problem that has arisen with research in this area is the limited consensus on how personality should be defined and measured. Personality psychology has lacked a descriptive model of personality traits that would allow researchers to study domains of personality in a more consistent and simplified way. Within the last two decades, a taxonomy of personality traits, known as the *Big Five*, has emerged, greatly influencing the research on personality. This parsimonious yet comprehensive framework has been widely accepted as a means to organize the multitude of personality traits and to consistently integrate

and communicate findings. The *Big Five* model has thus been used to explore the predictive validity of personality variables in the workplace.

Another challenge that researchers have faced in studying personality in the workplace is how to analyze personality at the team level. In studying team configuration or composition, they have begun to examine the interaction between team members who possess varying levels of personality traits and the diversity of personality traits in the team. This has led researchers to use various methods to operationalize individual personality traits at the team level, including the variance of scores and the minimum and maximum scores of team members.

Research from the social sciences has helped to expand the understanding of the role of team functioning, personality, and satisfaction in the workplace. However, the emphasis in small group research has been on groups formed and studied in laboratory settings without on-going social contexts. As such, long-term relational interactions cannot be observed. Additionally, many studies in the area of applied psychology have not been transferred to settings for practical application (Salas & Cannon-Bowers, 2000).

Equally problematic is the fact that educational literature lacks models of effective teamwork often found in the organizational literature. In fact, the influence of social context on socio-cognitive processes in collaborative groups remains largely uninvestigated in educational psychology (den Bossche, Gijsselaers, Segers, & Kirschner, 2006). Intensifying this problem is the long-standing tradition of teachers working in isolation. Educators learn to work alone, cope with problems individually, and continue to develop their professional skills

on their own (Somach & Drach-Zahavy, 2007). While the corporate world trains its employees to work in teams, the education world has often neglected to provide teachers and administrators with the necessary skills to function in collaborative settings. As a result, conflict and frustration may develop, diminishing the effectiveness of the team as well as a team member's growth and personal fulfillment.

Collaborative teaming in schools is an important means for teachers to study their profession in community with others, which may lead to school-wide improvement of practice (DuFour, Eaker, & DuFour, 2005; Hindin, Morocco, Mott, & Aguilar, 2007; Hord, 2007; Little, 2002). Therefore, there is a great need for educators to maximize the potential of collaborative teams. This is even more critical for Rhode Island middle schools since the Rhode Island Board of Regents has adopted regulations increasing the amount of common planning time for middle school interdisciplinary teams (RIDE, 2006, p.8). With teaming becoming more commonplace in schools, and middle school teams expected to participate in common planning times more frequently and regularly, it is beneficial to the educational field to use past and current research to better understand how team members can work together more effectively.

LITERATURE REVIEW

The historical roots of the work team are broad, encompassing early laboratory research as well as field studies, multiple countries, and differentiated

functions and practices. Additionally, the use of teams has become prevalent in various fields, including manufacturing and business, the military, non-profit organizations, education, and government.

In the last 10-20 years, there has been wide recognition that teams have the potential to respond to the demands of economic and technological change. The shift from a bureaucratic model to a more team-based design has readied organizations to compete in the global market. Additionally, other paradigm shifts have supported the transition to a flatter structure in organizations. For example, products and services are now more complex and require input from multiple people working collaboratively. Also, there has been a move from a predominantly industrial society to one based on service, knowledge, and technology (Bell, 2007).

Collaborative Teams in Schools

Teaming is recognized as a social arrangement where work is organized and accomplished by interdependent individuals (Spraker, 2003). Acknowledging this concept in education has been challenging because of the level of teacher autonomy and independence traditionally fostered by the American school system (Elmore, 2002; Spraker). This isolation has stifled the growth of individual teacher learning and has limited efforts for school-wide improvement (DuFour et al., 2005; Elmore, 2000; Fullan, 2001; Little, 2002; Schmoker, 2006).

Fortunately, a more prominent shift toward shared practice has begun to emerge in schools with the establishment of collaborative teams, especially in middle schools (Blankstein, 2004; Hindin et al., 2007). In order to meet the

developmental needs of adolescents, a major reform effort was initiated in 1989 with the groundbreaking report *Turning Points: Preparing American Youth for the 21st Century* (Jackson & Davis, 2000). As part of that effort, many middle schools developed and implemented interdisciplinary teams, comprised of teachers from various content areas who share the same students (Jackson & Davis; Spraker, 2003). While middle schools have implemented teaming for many years, teaming remains a challenging and complex process. In order for team teachers to accomplish their goals, they must be able to work interdependently and adaptively. Their effectiveness will depend on how they are able to function with one another.

Personality Traits

Personality plays an important role in team functioning as individual differences, such as personality traits, may influence positive interaction among team members (Anderson, Martin, & Riddle, 2001; Aubé & Rousseau, 2005; DuBrin, 2002). Personality refers to an individual's characteristic patterns of thought, emotion, and behavior, and the psychological mechanisms behind those patterns (Funder, 2001). The extent that an individual possesses a particular personality trait predisposes that individual to behave in a certain way.

Within the last two decades, a taxonomy of personality traits, known as the Five Factor Model (FFM) or the *Big Five*, has emerged. This integrative taxonomy, which has generalized across measures and cultures, has helped to synthesize empirical findings in personality research in organizations (Judge, Heller, & Mount, 2002; McAdams & Pals, 2006). The *Big Five* refers to the broad

and relatively independent dimensions of extraversion, conscientiousness, agreeableness, neuroticism, and openness to experience. The use of the *Big Five* provided a means to explore the predictive validity of personality variables in the workplace.

Different methods to operationalize individual personality traits at the team level have developed as research on team personality has increased. Prior to team configuration research, researchers traditionally focused on personality traits at the individual level and the mean was the most popular aggregation used. Group researchers are now acknowledging the inadequacy of this method and the need for a multilevel theory of analysis. This perspective is important because teams represent a group-level or collective phenomenon. Multilevel theories suggest that individual characteristics aggregate to the team level in various ways (Driskell, Salas, Goodwin, & O'Shea, 2006; Humphrey, Hollenbeck, Meyer, & Ilgen, 2007; Kozlowski & Klein, 2000; Mohammed & Angell, 2003; Mount, Barrick, & Ryan, 2003; Stewart, 2003).

Satisfaction with the Team

Working in teams may provide an opportunity for interdependence, shared learning, and collaboration. Teams have the potential to offer greater flexibility and creativity and provide more comprehensive, innovative solutions to complex problems. However, the team experience may not always be positive and rewarding. Team personality configuration and interpersonal relationships may influence the levels of group member satisfaction which may have far-reaching effects on the individual and the organization. Therefore, an individual's

satisfaction with working on a team becomes an important variable in the study of teams.

There has been limited research on the relationship between the *BFI* personality traits and team satisfaction as an outcome variable. In one study of $N = 133$ task groups of undergraduate business students, Molleman, Nauta, and Jehn (2004) used hierarchical linear modeling and found that emotional stability was positively related to a team member's task satisfaction ($b = .38, p < .01$). And, in a more recent study, Peeters et al. (2006) used hierarchical linear modeling to examine the relationship between the *BFI* personality traits and an individual's satisfaction with working on a team. A questionnaire was administered to $N = 130$ undergraduates on $N = 68$ teams who worked on an engineering design. The results of the study indicated an increase in a team member's satisfaction with the team when the individual is more agreeable ($b = .27, p = .03$) and emotionally stable ($b = .36, p < .01$) and more similarly conscientious (negative predictor: $b = -.58, p < .001$). Highly extraverted members were satisfied with their team regardless of similarity.

More research is needed to explore the relationship of personality traits to an individual's satisfaction in working with the team. This remains an area in group research that has yet to be developed and which has important potential implications for increased positive team experiences and team effectiveness.

RESEARCH QUESTIONS

The following research questions were developed to direct this study:

1. At the individual level of analysis, what is the relationship of individual Satisfaction with the Team and the following personality variables: Extraversion, Conscientiousness, Agreeableness, Emotional Stability, and Openness to Experience?
2. What is the relationship of individual Satisfaction with the Team and the following demographic variables: number of teammates, frequency and duration of common planning times per week, number of years a respondent has participated in teaming practices, new team members on the team, and professional development in teaming strategies (i.e., conflict management, collaborative problem-solving, relational communication, and social support)?
3. What is the relationship of General Job Satisfaction and Satisfaction with the Team?
4. After controlling for demographic variables and General Job Satisfaction, to what extent and in what manner can variation in Satisfaction with the Team be explained by the following personality variables: Extraversion, Conscientiousness, Agreeableness, Emotional Stability, and Openness to Experience?
5. At the team level of analysis (i.e., $N = 49$ teams), what is the relationship of mean Satisfaction with the Team and the following personality variables: Extraversion, Conscientiousness, Agreeableness, Emotional Stability, and Openness to Experience? (Two types of *BFI* variables used: mean of the **variability** of each *BFI* variable and the **mean** of each *BFI* variable.)

6. At the team level of analysis, what is the relationship of mean Satisfaction with the Team and the minimum and maximum level of the following personality variables: Extraversion, Conscientiousness, Agreeableness, Emotional Stability, and Openness to Experience?
7. How do team members feel about working with team members whose behaviors reflect similar or different personality traits?

METHODOLOGY

A mixed methods sequential study utilized a survey methodology followed by open-ended interviews. This mixed method allowed the results of the qualitative approach to inform the results of the quantitative approach, providing deeper insights and understanding (Creswell, 2003). Using this combined methodology supports a systematic, rigorous, and empirical approach to the educational research (McMillan & Wergin, 2006). The questionnaire was chosen as the instrument for this study because it is an effective data-collection method that can inquire about the attitudes and experiences of individuals (Gall, Borg, & Gall, 1996). This method of data collection is inexpensive and the results can be obtained in a timely manner from an accessible population (Bourque & Fielder, 1995; Creswell). The interview was chosen to provide a more private setting for the participant to share personal experiences regarding team members' personalities and interactions.

Quantitative Research

Participants/Data Collection

The quantitative data were collected from a questionnaire that was administered to a purposive sample of full-time regular education teachers and special education teachers who were members of approximately $N = 49$ interdisciplinary teams at $N = 7$ middle schools in Rhode Island. This sample included only team teachers who participate in regularly scheduled common planning time during the school day since opportunities for meaningful collaboration are most successful when embedded in the school day (DuFour et al., 2005; Jolly, 2005). The team teachers' experience in collaborative planning enabled them to respond to the questionnaire items, yielding the desired results (Gall et al., 1996). In an attempt to increase participation, the surveys were administered during regularly scheduled team and faculty meetings. Additionally, incentives (\$5 Dunkin' Donuts gift cards) were given to each participant. A total of $N = 244$ participants completed and returned the questionnaire yielding a 90% response rate. The demographics of the sample represented middle schools in Rhode Island and included urban and suburban schools from various geographic areas of the state, thus allowing the study to be generalized to middle schools in Rhode Island that are structured with interdisciplinary teams and provide regular common planning time during the school day.

Instrumentation

The BFI questionnaire was developed by John, Donahue, and Kentle (1991). The inventory is comprised of 44 items that measure the prototype definitions of the five personality traits that were developed through the literature on personality and the judgments of educational and industrial psychologists to gain

support for content validity of the questionnaire. The five personality traits include: Extraversion, Conscientiousness, Agreeableness, Emotional Stability, and Openness to Experience. Additional items were developed by the researchers to assess individual team member satisfaction with the team, and general job satisfaction. These items were developed based on the literature regarding working in teams and general job satisfaction and were reviewed by content specialists. The items were piloted with $n = 20$ middle school teachers and their feedback was used to revise the individual satisfaction and general job satisfaction items. Alpha reliabilities for the data from the *BFI* dimensions ranged from .74 to .85. Demographic variables included: number of teammates, frequency and duration of common planning times, number of years a respondent has participated in teaming practices, new team members on the team, and professional development in teaming strategies. The entire questionnaire was completed by participants in less than 8 minutes. Questionnaires were numerically coded to categorize participants from respective teams, ensuring that the teams and the participants remained anonymous. This anonymity was further emphasized in all communication with the school principals and participants.

Data Analysis

The quantitative data were analyzed using descriptive and correlational statistics including multiple regression.

Qualitative Research

Participants/Data Collection

The qualitative data were collected from the open-ended interviews with $n = 14$ teachers who were randomly selected from a pool of interested interviewees. These teachers were representative of the $N = 7$ middle schools selected for the study. The interviews provided data on how team members feel about working with other members of the team whose behaviors reflect similar or different personality traits and about how their team functions (Research Question 7). The questions were derived from the literature and were designed to gradually elicit more informal conversation as the interview progressed.

The interviews were tape-recorded, transcribed, and summarized using only the information pertinent to the interpretation of the findings (Rubin & Rubin, 2005). Concepts and themes were systematically coded and sorted and a final synthesis was used to compare this qualitative data to the quantitative data regarding team personality, individual personality, and individual satisfaction. Interview participants received \$10 gift certificates (Staples) as an incentive.

PRINCIPAL FINDINGS

Research Question 1

1. The correlations between the *BFI* traits and Satisfaction with the Team were not as high as anticipated. None of the predictors correlated well enough with Satisfaction with the Team to explain variation in it. (See **Tables 1, 2, and 3**).
2. The relationship between the *BFI* dimensions and Satisfaction with the Team varied for team tenure. (See **Table 4**)

Research Question 2

3. There was a significant correlation between team tenure and Satisfaction with the Team ($r = .14$, $r^2 = .02$, $p = .028$; small effect size).

Research Question 3

4. There was a significant positive correlation between General Job Satisfaction and Satisfaction with the Team ($r = .16$, $r^2 = .02$, $p = .01$; small effect size).

Research Question 4

5. The General Job Satisfaction and tenure covariates were significant in that they explained 4% of the variance ($R = .21$, $R^2 = .04$, small effect size) in Satisfaction with the Team.

Research Question 5

6. There was a mild tendency for variability within the team to be negatively related to satisfaction. (See **Table 5**)

7. There was a small inverse relationship between mean Satisfaction with the Team and Openness to Experience ($r = -.28$, $r^2 = .09$, $p = .054$; medium effect size).

8. The regression analysis indicated that variation in the means of the $N = 49$ team means for Satisfaction with the Team could not be predicted by the trait variance or by the *BFI* trait mean information.

Research Question 6

9. A significant negative correlation was found between maximum Extraversion and mean Satisfaction with the Team ($r = -.44$, $r^2 = .19$, $p = .002$; medium effect size) and between maximum Agreeableness and mean Satisfaction with the Team ($r = -.31$, $r^2 = .10$, $p = .031$; medium effect size). (See **Table 6**)

Research Question 7

10. Team climate, team member personality, and team personality configuration, were factors related to Satisfaction with the Team. (See **Table 7**)

DISCUSSION AND CONCLUSIONS

Many of the findings in this study were supported by small group research which has examined team functioning, the *Big Five* personality traits, and job satisfaction. This research provides insight to the findings in this study, though the current study is one of only a few to examine the *Big Five* personality traits in relationship to Satisfaction with the Team.

Real Life Teams

Stewart and colleagues have found that time spent as a team is a critical factor in the successful evolution of team functioning (Stewart, Fulmer, & Barrick, 2005). The findings from this study indicated that 75% of the participants from the ($N = 7$) Rhode Island middle schools met either two or three times per week during a structured common planning block during the school day. This common planning block lasted for either 30-45 minutes or 45-60 minutes. The teams in this study meet in person, on a regular basis, are stable in membership, and are considered relatively permanent for the school year. This was important to the study because one of the voids in previous research has been the opportunity to examine real life work situations with longer-lived work teams. Additionally, it allowed consideration of team developmental stages, which surfaced as an important concept in relation to group functioning (Wheelan, 2003). Interviewees related their level of satisfaction to the stability and maturity of their teams.

Individual-level Analysis

At the individual-level of analysis, it was found that the *BFI* traits did not correlate significantly with Satisfaction with the Team and subsequently none of the *BFI* trait predictors explained variation in Satisfaction with the Team. Examination of several studies that used the *BFI* instrument indicated restricted ranges of variance for the *BFI* traits, which may have limited them as good predictors. Also, it is possible that analysis at the individual level may not predict Satisfaction with the Team due to the relational nature of teams. Rather than analyzing the individual personality traits in isolation, they may be better understood in connection to the attributes of the other team members and their

contextual setting (Barrick & Mount, 2005; Schneider, Smith, & Goldstein, 2000). Therefore, analysis at the team level may provide more meaningful interpretations than at the individual level of analysis.

Team Tenure/Experience

One unexpected finding in the study was the role of team tenure. Teachers with 4-10 years experience participating on a team ($n = 101$) demonstrated a significant negative correlation for Conscientiousness and Satisfaction with the Team while teachers with three years or less experience with teaming ($n = 43$), demonstrated a significant positive correlation. And, there was no relationship for teachers with more than 10 years experience with teaming. There was also a significant correlation between team tenure and Satisfaction with the Team. The concept of team tenure was not evident in any of the previous *Big Five* studies reviewed. However, organizational demography research supports the fact that demographic variability may influence social or task interactions, affecting how the group functions (Bedian & Mossholder, 2000; Valenti & Rockett, 2008). In fact, group members may use demographic characteristics to infer a person's skills, which could contribute to an individual's influence on the group (Anderson, Spataro, & Flynn, 2008).

Operationalizing Team Personality

There is a considerable amount of literature that focuses on how personality is operationalized as a team concept. It is clear from multilevel theories of analysis that individual-level personality data is aggregated in various ways to derive team-level variables (Driskell et al., 2006; Humphrey et al., 2007; Kozlowski &

Klein, 2000; Mohammed & Angell, 2003; Mount et al., 2003; Stewart, 2003). This includes use of the mean, variance of scores, and minimum and maximum scores of team members. In this study, use of the mean did not predict Satisfaction with the Team, except for a small inverse relationship between Satisfaction with the Team and Openness of Experience. Researchers have questioned the use of the mean and some have found it to be inadequate to analyze group-level data, claiming that individual characteristics do not combine in a linear fashion (Bell, 2007; Stewart, 2006). Researchers have had more success with the use of standard deviation (Mohammed & Angell, 2003; Peeters, Rutte, van Tuijl, & Reymen, 2008). Using standard deviation, this study found a mild tendency for variability to be negatively related to mean Satisfaction with the Team. This finding is supported by the literature on homogeneity and supplementary fit which suggests that people with similar traits are more comfortable with each other and more attracted to working together (Cable & Edwards, 2004; DeDreu & Weingart, 2003; Halfhill, Sundstrom, Lahner, Calderone, & Nielsen, 2005; Ilgen, Hollenbeck, Johnson, & Jundt, 2005; Kristof-Brown, Barrick, & Stevens, 2005). This study also used minimum and maximum scores to analyze the team-level data. This process is based on the dominance effect which proposes that the team's traits depend on the individual trait of a single member. Through this method, it was found that maximum Extraversion and maximum Agreeableness were negatively related to mean Satisfaction with the Team. The negative relationship between Maximum Extraversion and mean Satisfaction with the Team was supported in the literature (Alper, Tjosvold, &

Law, 2000; Barrick, Mitchell, & Stewart, 2003; Barry & Stewart, 1997) and by the qualitative data. However, much of literature (Hurtz & Donovan, 2000; Peeters et al., 2006; Stewart et al., 2005), and the qualitative data, contradicted the negative relationship between maximum Agreeableness and mean Satisfaction with the Team.

Group Composition

Two other theories derived from the person-environment fit literature were supported by the data. John Holland's theory of vocation maintains that people flourish in environments where there is a good fit between their personality and their environment (Holland, 1996; Lounsbury, Smith, Levy, Leong, & Gibson, 2009). And, the supplies-values fit suggests that an individual's preferences, such as a preference for group work will result in optimal outcomes (Hollenbeck et al., 2002). Through the open-ended interviews, team members shared extensively how the personalities of their teammates, and the configuration or mixture of personalities, as well as the dynamics of the group, related to their satisfaction with the team. They discussed the impact of these factors on the climate of the team and their ability to benefit from the team experience.

RECOMMENDATIONS

The findings from the study have several implications for practice and research in the areas of personnel selection, staff development, and appraisal of team effectiveness. Recommendations for future research include: investigating various methods of team analysis, measures of effective teamwork behavior, measures of lower-level facets of the *Big Five* traits, the mediating effect of

conflict on team satisfaction, and the mediating effects of team leaders on team functioning.

Table 1

Total Group Descriptive Statistics: BFI Traits, Satisfaction with the Team, General Job Satisfaction (N = 244)

Variable	Minimum	Maximum	Mean	SD
Extraversion	1.25	5.00	3.68	.76
Agreeableness	2.78	5.00	4.32	.49
Conscientiousness	2.22	5.00	4.23	.57
Neuroticism	1.00	4.38	2.40	.72
Openness	2.00	5.00	3.73	.64
TeamSat	1.25	5.00	4.13	.84
GenJobSat	1.60	5.00	4.46	.63

Note. Neuroticism reverse measure for Emotional Stability; responses based on 5-point Likert scales. The response format for the BFI traits was as follows: 1 = strongly disagree, 2 = disagree a little, 3 = neither agree or disagree, 4 = agree a little, 5 = strongly agree. The response format for Satisfaction with the Team (TeamSat) was as follows: 1 = not at all, 2 = a little, 3 = somewhat, 4 = a lot, 5 = a great extent. The response format for General Job Satisfaction (GenJobSat) was as follows: 1 = strongly disagree, 2 = disagree, 3 = neither agree or disagree, 4 = agree, 5 = strongly agree.

Table 2

Team Level Descriptive Statistics: BFI Traits, Lowest and Highest Group Means, Standard Deviation, Lowest and Highest Group Standard Deviation (N = 49)

Variable	Mean of the 49 Team Means	Lowest Team Mean	Highest Team Mean	Mean of the 49 Team SD's	Lowest Team SD	Highest Team SD
Extraversion	3.67	3.00	4.20	.76	.31	1.49
Agreeableness	4.31	3.78	4.71	.45	.11	.87
Conscientiousness	4.24	3.65	4.80	.53	.12	.98
Neuroticism	2.41	1.92	3.15	.68	.12	1.28
Openness	3.72	3.10	4.12	.61	.17	1.03
MeanTeamSat	4.15	2.92	5.00	.59	.00	1.59

Note. MeanTeamSat = mean Satisfaction with the Team.

Table 3

Studies using the BFI instrument

Study	Participants	BFI Traits				
		E	A	C	N	O
Humbyrd 2010 Relationship of Big Five Traits to Satisfaction with the Team	244 RI middle school team teachers					
Mean		3.68	4.32	4.23	2.40	3.73
SD		.76	.49	.57	.72	.64
Donnellan, Oswald, Baird, Lucas 2006 The Mini-IPIP Scales: Tiny-Yet-Effective Measures of the Big Five Factors of Personality	300 undergrads in psych courses Univ. Michigan					
Mean		3.43	3.82	3.63	2.93	3.50
SD		.72	.56	.60	.73	.57
Srivasta, John, Gosling 2003 Development of Personality in Early and Middle Adulthood: Set Like Plaster or Persistent Change?	132,515 adults 21-60					
Mean		3.18	3.66	3.55	3.04	3.98
SD		1.90	1.72	1.73	1.88	1.66
Benet-Martinez & John 1998 <i>Los Cinco Grandes</i> Across Cultures and Ethnic Groups: Multitrait Multimethod Analyses of Big Five in Spanish & English	170 English-Spanish Bilingual college undergrads					
Mean		3.20	3.80	3.60	3.0	3.7
SD		.82	.59	.67	.80	.66
McConochie 2007 The Big Five Inventory Manual	166,579 Caucasian Females					
Mean		3.13	3.44	3.66	3.23	3.92
SD		.89	.75	.72	.84	.66
Yik & Russell 2001 Predicting the Big Two of Affect from the Big Five of Personality	217 undergrads Univ. Br. Columbia					
Mean		3.06	3.72	3.38	3.19	3.50
SD		.79	.60	.67	.73	.63

Note. The variables indicated are as follows: E = Extraversion, A = Agreeableness, C = Conscientiousness, N = Neuroticism, O = Openness to Experience.

Table 4

Correlations of BFI and Satisfaction with the Team by Team Tenure

BFI variable	Total Population	Tenure Groups				
		1	2	3	4	1 & 2
Extraversion	-.01	-.13	-.12	.02	.01	-.12
Agreeableness	.09	.18	.38	.08	.03	.22
Conscientiousness	-.002	.39	.22	-.21*	.04	.34*
Neuroticism	-.04	.10	-.06	-.14	.00	.07
Openness	-.01	-.22	.32	-.07	.05	-.06

Note. Tenure Group Code: 1 = First year ($n = 22$), 2 = 0-3 yrs. ($n = 21$), 3 = 4-10 yrs. ($n = 101$), 4 = more than 10 yrs. ($n = 99$).

The correlation $r = .39$ was reported at the .07 level of significance; $r = .38$ was reported at the .08 level of significance.

* $p < .05$.

Table 5

Correlation of Mean Satisfaction with the Team and BFI Variability (N = 49)

Variables	SD E	SD A	SD C	SD N	SD O
MTeamSat	-.25*	-.22	-.07	-.24*	-.10
SDExtraversion		.13	.03	.30	.10
SDAgreeableness			.12	.24	-.03
SDConscientiousness				.35	-.04
SDNeuroticism					.27

Note. MTeamSat = mean Satisfaction with the Team, E = Extraversion, A = Agreeableness, C = Conscientiousness, N = Neuroticism, O = Openness to Experience.

* $p < .05$, 1-tailed.

Table 6

Correlations of Maximum and Minimum BFI scores and Mean Satisfaction with the Team (N = 49)

	Max E	Max A	Max C	Max N	Max O
MTeamSat	-.44**	-.31*	-.10	-.16	-.26^a
	Min E	Min A	Min C	Min N	Min O
MTeamSat	.05	.10	.08	.18	-.04

Note. MTeamSat = mean Satisfaction with the Team, E = Extraversion, A = Agreeableness, C = Conscientiousness, N = Neuroticism, O = Openness to Experience; Max = maximum, Min = minimum.

^a $r = -.26$. $p = .067$.

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

Table 7

Emergent Concepts and Themes from the Open-Ended Interviews (N = 14)

Concept	Theme
Benefits of Teaming	<ol style="list-style-type: none"> 1. Benefits to Students 2. Benefits to Teachers
Team Climate	<ol style="list-style-type: none"> 1. Respect 2. Trust 3. Flexibility 4. Humor
Personality Traits	<ol style="list-style-type: none"> 1. Extraversion 2. Conscientiousness 3. Agreeableness 4. Neuroticism 5. Openness to Experience
Team Composition	<ol style="list-style-type: none"> 1. Heterogeneity 2. Influence of One Member 3. Influence of New Member
Satisfaction	<ol style="list-style-type: none"> 1. Tension 2. Consensus 3. Developmental Stages 4. Positive and Negative Feelings

REFERENCES

- Alper, S., Tjosvold, D., & Law, K. (2000). Conflict management, efficacy, and performance in organizational teams. *Personnel Psychology, 53*(3), 625-642. doi:10.1111/j.1744-6570.2000.tb00216.x
- Anderson, C., Martin, M., & Riddle, B. (2001). Small group relational satisfaction scale: Development, reliability and validity. *Communication Studies, 52*(3), 220-233. Retrieved from <http://www.tandf.co.uk/journals/RCST>
- Anderson, C., Spataro, S., & Flynn, F. (2008). Personality and organizational culture as determinants of influence. *Journal of Applied Psychology, 93*(3), 702-710. doi:10.1037/0021-9010.93.3.702
- Aubé, C., & Rousseau, V. (2005). Team goal commitment and team effectiveness: The role of task interdependence and supportive behaviors. *Group Dynamics: Theory, Research, and Practice, 9*(3), 189-204. doi:10.1037/1089-2699.9.3.189
- Barrick, M. R., Mitchell, T. R., & Stewart, G. L. (2003). Situational and motivational influences on trait-behavior relationships. In M. R. Barrick & A. M. Ryan (Eds.), *Personality and work: Reconsidering the role of personality in organizations* (pp. 60–82). San Francisco, CA: Jossey-Bass.
- Barrick, M. R., & Mount, M. K. (2005). Yes, personality matters: Moving on to more important matters. *Human Performance, 18*(4), 359-372. doi:10.1037/0021-9010.88.1.100
- Barry, B., & Stewart, G. L. (1997). Composition, process, and performance in self-managed groups: The role of personality. *Journal of Applied Psychology, 82*(1), 62-78. doi:10.1037/0021-9010.82.1.62
- Bedian, A. G., & Mossholder, K. W. (2000). On the use of the coefficient of variation as a measure of diversity. *Organizational Research Methods, 3*(3), 285-297. doi:10.1177/109442810033005
- Bell, S. (2007). Deep-level composition variables as predictors of team performance: A meta-analysis. *Journal of Applied Psychology, 93*(3), 595-615. doi:10.1037/0021-9010.92.3.595
- Blankstein, A. (2004). *Failure is not an option: Six principles that guide student achievement in high-performing schools*. Thousand Oaks, CA: Corwin Press.
- Bourque, B., & Fielder, E. (1995). *How to conduct self-administered and mail surveys*. Thousand Oaks, CA: Sage.

- Cable, D., & Edwards, J. (2004). Complimentary and supplementary fit: A theoretical and empirical integration. *Journal of Applied Psychology, 89*(5), 822-834. doi:10.1037/0021-9010.89.5.822
- Creswell, J. (2003). *Research Design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- DeDreu, C., & Weingart, L. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology, 88*(4), 741-749. doi:10.1037/0021-9010.88.4.741
- den Bossche, P., Gijssels, W., Segers, M., & Kirschner, P. (2006). Social and cognitive factors driving teamwork in collaborative learning environments: Team learning beliefs and behaviors. *Small Group Research, 37*(5), 490-521. doi:10.1177/1046496406292938
- Driskell, J., Salas, E., Goodwin, G., & O'Shea, P. (2006). What makes a good team player? Personality and team effectiveness. *Group Dynamics: Theory, Research, and Practice, 10*(4), 1089-2699. doi:10.1037/1089-2699.10.4.249
- DuBrin, A. (2002). *The winning edge: How to motivate, influence & manage your company's human resources*. Cincinnati, OH: Wouth-Western College Publishing.
- DuFour, R., Eaker, R., DuFour, R. (2005). Recurring themes of professional learning communities and the assumptions they challenge. In R. DuFour, R. Eaker, & R. DuFour (Eds.), *On common ground: The power of professional learning communities* (pp. 7-29). Bloomington, IN: National Education Service.
- Elmore, R. F. (2000, Winter). *Building a new structure for school leadership*. Washington, DC: The Albert Shanker Institute. Retrieved from <http://www.shakerinstitute.org/Downloads/building.pdf>
- Elmore, R. F. (2002). *Bridging the gap between standards and achievement*. Washington, DC: The Albert Shanker Institute.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.
- Funder, D. C. (2001). *The personality puzzle*. (2nd ed.). New York, NY: Norton.
- Gall, M., Borg, W., & Gall, J. (1996). *Educational research: An introduction*. New York, NY: Longman Publishers USA.

- Halfhill, T., Sundstrom, E., Lahner, J., Calderone, W., & Nielsen, T. (2005). Group personality composition and group effectiveness: An integrative review of empirical research. *Small Group Research*, 36(1), 83-105. doi:10.1177/1046496404268538
- Hindin, A., Morocco, C., Mott, E., & Aguilar, C. (2007). More than just a group: Teacher collaboration and learning in the workplace. *Teachers and Teaching: theory and practice*, 13(4), 349-376. doi:10.1080/13540600701391911
- Hollenbeck, J., DeRue, D., & Guzzo, R. (2004). Bridging the gap between I/O research and HR practice: Improving team composition, team training, and team task design. *Human Resource Management*, 43(4), 353-366. doi:10.1002/hrm.20029
- Hollenbeck, J., Moon, H., Ellis, A., West, B., Ilgen, D., Sheppard, L., et al. (2002). Contingency theory and individual differences: Examination of external and internal person-team fit. *Journal of Applied Psychology*, 87(3), 599-606. doi:10.1037//0021-9010.87.3.599
- Hord, S. (2007). Learn in community with others. *Journal of Staff Development*, 28(3), 39-40. Retrieved from <http://vnweb.hwwilsonweb.com/hww/Journals/getIssues.jhtml?sid=HWW:EDI&id=02131>
- Humphrey, S., Hollenbeck, J., Meyer, C., & Ilgen, D. (2007). Trait configurations in self-managed teams: A conceptual examination of the use of seeding for maximizing and minimizing trait variance in teams. *Journal of Applied Psychology*, 92(3), 885-892. doi:10.1037/0021-9010.92.3.885
- Hurtz, G., & Donovan, J. (2000). Personality and job performance: The Big Five revisited. *Journal of Applied Psychology*, 85(6), 869–879. doi:10.1037/0021-9010.85.6.869
- Ilgen, D. R., Hollenbeck, J. R., Johnson, M. D., & Jundt, D. K. (2005). Teams in organizations: From input–process–output models to IMO models. *Annual Review of Psychology*, 56, 517–543. doi:10.1146/annurev.psych.56.091103.070250
- Jackson, A. & Davis, G. (2000). *Turning points 2000: Educating adolescents in the 21st century*. New York, NY: Teachers College Press and Westerville, OH: National Middle School Association.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory—Versions 4a and 54*. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research.

- Jolly, A. (2005). A facilitator's guide to professional learning teams: Creating on-the-job opportunities for teachers to continually learn and grow. *SERVE: Improving learning through research & development*. Associated with the School of Education, University of North Carolina. Retrieved from http://www.serve.org/_downloads/publications/PLTgooksam.pdf.
- Judge, T., Heller, D., & Mount, M. (2002). Five-factor model of personality and job satisfaction. *Journal of Applied Psychology, 87*(3), 530-541. doi:10.1037//0021-9010.87.3.530
- Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K.J. Klein & S.W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (3-90). San Francisco, CA: Jossey-Bass.
- Kristof-Brown, A., Barrick, M. R., & Stevens, C. K. (2005). When opposites attract: A multi-sample demonstration of complementary person–team fit on extraversion. *Journal of Personality, 73*(4), 935–958. doi:10.1111/j.1467-6494.2005.00334.x
- Little, J. (2002). Locating learning in teachers' communities of practice: Opening up problems of analysis in records of everyday work. *Teaching and Teacher Education, 18*(8), 917-946. doi:10.1016/S0742-051X(02)00052-5
- Lounsbury, J. W., Smith, R. M., & Levy, J.J., Leong, F. T., Gibson, L. W. (2009). Personality characteristics of business majors as defined by the big five and narrow personality traits. *The Journal of Education for Business, 84*(6), 200-204. doi:10.3200/JOEB.84.6
- Mason, C. M., & Griffin, M. A. (2003). Identifying group task satisfaction at work. *Small Group Research, 34*(4), 413-442. doi:10.1177/1046496403252153
- McAdams, D. P., & Pals, J. L. (2006). A new big five: Fundamental principles for an integrative science of personality. *American Psychologist, 61*(3), 204–217. doi:10.1037/0003-066X.61.3.204
- McMillan, J.H., & Wergin, J.F. (2006). *Understanding and Evaluating Educational Research*. Upper Saddle River, NJ: Pearson Education, Inc.
- Mohammed, S., & Angell, L. (2003). Personality heterogeneity in teams: Which differences make a difference for team performance? *Small Group Research, 34*(6), 651-677. doi:10.1177/1046496403257228

- Molleman, E., Nauta, A., & Jehn, K. A. (2004). Person-job fit applied to teamwork. A multilevel approach. *Small Group Research*, 35(5), 515-539. doi:10.1177/1046496404264361
- Mount, M., Barrick, M., & Ryan, A. (2003). Research themes for the future. In M. Barrick & A. Ryan (Eds.), *Personality and Work* (pp. 326-344). San Francisco, CA: Jossey-Bass.
- Peeters, M., Rutte, C., van Tuijl, H., & Reymen, I. (2006). The big five personality traits and individual satisfaction with the team. *Small Group Research*, 37(2), 187-211. doi:10.1177/1046496405285458
- Peeters, M., Rutte, C., van Tuijl, H., & Reymen, I. (2008). Designing in teams: Does personality matter? *Small Group Research*, 39(4), 438-467. doi:10.1177/1046496408319810
- Rhode Island Department of Education (2006). *Regulations of the board of regents for elementary and secondary education regarding literacy, proficiency based graduation and restructuring of the learning environment at the middle and high school levels*, 1-10. Retrieved September 28, 2009, from <http://www.ridoe.org/careerdev/hsregulations.htm>
- Rubin, H. J., & Rubin, I. (2005). *Qualitative interviewing: The art of hearing data* (2nd ed.). Thousand Oaks, CA: Sage.
- Salas, E., & Cannon-Bowers. (2000). Teams in organizations: Lessons from history. In M. Beyerlein (Ed.) *Work teams: Past, present, and future* (pp. 323-331). Boston, MA: Kluwer Academic Publishers.
- Salas, E., Sims, D., & Burke, C. (2005). Is there a 'big five' in teamwork? *Small Group Research*, 36(5), 555-599. doi:10.1177/1046496405277134
- Schmoker, M. (2006). *Results now: How we can achieve unprecedented improvements in teaching and learning*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Schneider, B., Smith, D., & Goldstein, H. (2000). Attraction-selection-attrition: Toward a person-environment psychology of organizations. In B. Walsh, K. Craik, & R. Price (Eds.), *Person-environment psychology: New directions and perspectives* (61-85). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Sessa, V., & London, M. (2008). Group learning: An introduction. In V. Sessa & M. London (Eds.), *Work group learning* (pp. 3-13). New York, NY: Lawrence Erlbaum Associates.

- Shani, A., & Lau, J. (2000). *Behavior in organizations: An experiential approach*. Boston, MA: Irwin McGraw-Hill.
- Somech, A., & Drach-Zahavy, A. (2007). Schools as team-based organizations: A structure-process-outcomes approach. *Group Dynamics: Theory, Research, and Practice*, 11(4), 305-320. doi/10.1037/1089-2699.11.4.305
- Spraker, J. (2003, July). *Teacher teaming in relation to student performance*. Northwest Regional Educational Laboratory. Retrieved September 4, 2007, from <http://www.nrel.org/re-eng/products/TeacherTeaming.pdf>.
- Stewart, G. L. (2003). Toward an understanding of the multilevel role of personality in teams. In M. Barrick & A. Ryan (Eds.), *Personality and work* (pp. 183-204). San Francisco, CA: Jossey-Bass.
- Stewart, G. L. (2006). A meta-analytic review of relationships between team design features and team performance. *Journal of Management*, 32(1), 29–54. doi:10.1111/j.1744-6570.2005.00480.x
- Stewart, G. L., Fulmer, I. S., & Barrick, M. R. (2005). An exploration of member roles as a multilevel linking mechanism for individual traits and team outcomes *Personnel Psychology*, 58(2), 343–365. doi:10.1111/j.1744-6570.2005.00480.x
- Valenti, M.A., & Rockett, T. (2008). The effects of demographic differences on forming intragroup relationships. *Small Group Research*, 39(2), 179-202. doi:10.1177/1046496408315981
- Wheelan, S. A., Davidson, B., & Tilin, F. (2003). Group development across time: Reality or illusion? *Small Group Research*, 34(2), 223-245. doi:10.1177/1046496403251608