

# **Constructive Controversy: The Value of Intellectual Conflict**

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## **Abstract**

Conflict is inherent in decision making and learning situations. It is a procedure for ensuring that effective decision in which all alternatives are given serious consideration and critically analyzed before deciding on which alternative to implement. It is also a procedure for maximizing learning in training and learning situations. In well structured controversies, participants make an initial judgment, present their conclusions to other group members, are challenged with opposing views, become uncertain about the correctness of their views, actively search for new information and understanding, incorporate others' perspectives and reasoning into their thinking, and reach a new set of conclusions. This process results in significant increases in the quality of decision making and problem solving (including higher-levels of cognitive and moral reasoning, perspective taking, creativity, and attitude change about the issue), motivation to learn more about the issue, positive attitudes toward the controversy and decision making processes, the quality of relationships, and self-esteem. A recent meta-analysis summarizes these results. Practical procedures for decision making and learning groups exist based on a foundation of theory and research.

# Constructive Controversy: The Value of Intellectual Conflict

## The Nature Of Controversy

*Since the general or prevailing opinion on any subject is rarely or never the whole truth, it is only by the collision of adverse opinion that the remainder of the truth has any chance of being supplied.*

John Stuart Mill

The procedure for decision making and problem solving that involve difficult issues is the constructive controversy procedure. Constructive controversy exists when one person's ideas, information, conclusions, theories, and opinions are incompatible with those of another, and the two seek to reach an agreement (Johnson & Johnson, 1979, 1989, 2000, 2003, 2007). Constructive controversy involves what Aristotle called deliberate discourse (i.e., the discussion of the advantages and disadvantages of proposed actions) aimed at synthesizing novel solutions (i.e., creative problem solving). Constructive controversy is most commonly contrasted with concurrence seeking, debate, and individualistic decisions. Concurrence seeking occurs when members of a group inhibit discussion to avoid any disagreement or argument, emphasize agreement, and avoid realistic appraisal of alternative ideas and courses of action. Concurrence seeking is close to Janis' (1982) concept of groupthink (i.e., members of a decision-making group set aside their doubts and misgivings about whatever policy is favored by the emerging consensus so as to be able to concur with the other members and thereby preserve the harmonious atmosphere of the group). Debate exists when two or more individuals argue positions that are incompatible with one another and a judge declares a winner on the basis of who presented their position the best. Individualistic decisions exist when individuals consider the issue alone while perceiving their goals to be unrelated and independent from the goals of others.

-----Insert Table 1 About Here-----

## **Theory Of Constructive Controversy**

*"There is no more certain sign of a narrow mind, of stupidity, and of arrogance, than to stand aloof from those who think differently from us."*

Walter Savage Landor

Over the past 35 years, we have (a) developed a theory of constructive controversy, (b) validated it through a program of research, (c) operationalized the validated theory into a practical procedure (there are two formats, one for decision-making situations and one for academic learning), (d) trained teachers, professors, administrators, managers, and executives in how to implement the constructive controversy procedure, and (e) developed a series of curriculum units, academic lessons, and training exercises structured for controversies. Our theorizing began with concepts taken from developmental, cognitive, social, and organizational psychology. The process through which constructive controversy creates positive outcomes involves the following theoretical assumptions (Johnson & Johnson, 1979, 1989, 2000, 2003, 2007) (see Figure 1):

1. When individuals are presented with a problem or decision, they have an initial conclusion based on categorizing and organizing incomplete information, their limited experiences, and their specific perspective. They have a high degree of confidence in their conclusions (they freeze the epistemic process).
2. When individuals present their conclusion and its rationale to others, they engage in cognitive rehearsal, deepen their understanding of their position, and use higher-level reasoning strategies. The more they attempt to persuade others to agree with them, the more committed they may become to their position.
3. When individuals are confronted with different conclusions based on other people's information, experiences, and perspectives, they become uncertain as to the correctness of their views and a state of conceptual conflict or disequilibrium is

- aroused. They unfreeze their epistemic process.
4. Uncertainty, conceptual conflict, or disequilibrium motivates epistemic curiosity, an active search for (a) more information and new experiences (increased specific content) and (b) a more adequate cognitive perspective and reasoning process (increased validity) in hopes of resolving the uncertainty.
  5. By adapting their cognitive perspective and reasoning through understanding and accommodating the perspective and reasoning of others, individuals derive a new, reconceptualized, and reorganized conclusion. Novel solutions and decisions that, on balance, are qualitatively better are detected. The positive feelings and commitment individuals feel in creating a solution to the problem together is extended to each other and interpersonal attraction increases. Their competencies in managing conflicts constructively tend to improve. The process may begin again at this point or it may be terminated by freezing the current conclusion and resolving any dissonance by increasing the confidence in the validity of the conclusion.

-----Insert Figure 1 About Here-----

The process that results, therefore, involves having an initial conclusion as to what course of action should be adopted to solve the problem, presenting a persuasive case for that conclusion while listening to persuasive presentations of opposing positions, feeling uncertain about the correctness of one's position, engaging in a search for better information and reconceptualizing one's views on the decision, and then coming to a new conclusion about what course of action should be adopted. Each time a person goes through this process his or her conclusions may be closer and closer approximations of the "truth."

## **Conditions Determining the Constructiveness of Controversy**

Depending on the conditions under which controversy occurs and the way in which it is managed, controversy may result in positive or negative consequences. These conditions

include the context within which the constructive controversy takes place, the level of group members' social skills, and group members' ability to engage in rational argument (Johnson & Johnson, 1979, 1989, 1995b, 2000).

### **Cooperative Goal Structure**

Deutsch (1973) emphasizes that the context in which conflicts occur has important effects on whether the conflict turns out to be constructive or destructive. There are two possible contexts for controversy: cooperative and competitive. In a cooperative situation, individuals perceive that they can achieve their goal if and only if the other group members achieve theirs; in a competitive situation, individuals perceive that they can achieve their goal if and only if all others with whom they are competitively linked fail to achieve their goals. A competitive context tends to promote destructive controversy whereas a cooperative context tends to facilitate constructive controversy. Controversy within a competitive context tends to promote closed-minded disinterest and rejection of the opponent's ideas and information. Within a cooperative context, constructive controversy induces more complete and accurate communication, more accurate understanding of the opponent's position, greater utilization of others' information, greater understanding of what others are feeling and why they are feeling that way, feelings of comfort, pleasure, and helpfulness in discussing opposing positions, more open-minded listening to the opposing positions, greater motivation to hear more about the opponent's arguments, more frequently seeking out individuals with opposing opinions to test the validity of their ideas, greater trust, and the reaching of more integrated positions where both one's own and one's opponent's conclusions and reasoning are synthesized into a final position.

### **Skilled Disagreement**

For controversies to be managed constructively, participants need collaborative and conflict-management skills (Johnson, 2003; Johnson & F. Johnson, 2003). The skills are necessary for following and internalizing these norms:

1. I am critical of ideas, not people. I challenge and refute the ideas of the other participants, while confirming their competence and value as individuals. I do not indicate that I personally reject them.
2. I separate my personal worth from criticism of my ideas.
3. I remember that we are all in this together, sink or swim. I focus on coming to the best decision possible, not on winning.
3. I encourage everyone to participate and to master all the relevant information.
4. I listen to everyone's ideas, even if I don't agree.
5. I restate what someone has said if it is not clear.
6. I differentiate before I try to integrate. I first bring out **all** ideas and facts supporting both sides and clarify how the positions differ. Then I try to identify points of agreement and put them together in a way that makes sense.
7. I try to understand both sides of the issue. I try to see the issue from the opposing perspective in order to understand the opposing position.
8. I change my mind when the evidence clearly indicates that I should do so.
9. I emphasize rationality in seeking the best possible answer, given the available data.
10. I follow the golden rule of conflict. I act towards opponents as I would have them act toward me. I want the opposing pair to listen to me, so I listen to them. I want the opposing pair to include my ideas in their thinking, so I include their ideas in my thinking. I want the opposing pair to see the issue from my perspective, so I take their perspective.

One of the most important skills is to be able to disagree with each other's ideas while confirming each other's personal competence (Tjosvold, 1998). Disagreeing with others, and at the same time imputing that others are incompetent, tends to increase their commitment to their own ideas and their rejection of the other person's information and reasoning. Disagreeing with others while simultaneously confirming their personal competence, however, results in being better liked and in opponents being less critical of

others' ideas, more interested in learning more about others' ideas, and more willing to incorporate others' information and reasoning into their own analysis of the problem. Protagonists are more likely to believe their goals are cooperative, integrate their perspectives, and reach agreement.

Another important set of skills for exchanging information and opinions within a constructive controversy is perspective-taking (Johnson, 1971; Johnson & Johnson, 1989). More information, both personal and impersonal, is disclosed when one is interacting with a person who is engaging in perspective-taking behaviors, such as paraphrasing, which communicate a desire to understand accurately. Perspective-taking ability increases one's capacity to phrase messages so that they are easily understood by others and to comprehend accurately the messages of others. Engaging in perspective-taking in conflicts results in increased understanding and retention of the opponent's information and perspective. Perspective-taking facilitates the achievement of creative, high-quality problem solving. Finally, perspective-taking promotes more positive perceptions of the information-exchange process, of fellow group members, and of the group's work.

A third set of skills involves the cycle of differentiation of positions and their integration (Johnson & F. Johnson, 2003). Group members should ensure that there are several cycles of differentiation (bringing out differences in positions) and integration (combining several positions into one new, creative position). The potential for integration is never greater than the adequacy of the differentiation already achieved. Most controversies go through a series of differentiations and integrations before reaching a final decision.

### **Rational Argument**

During a constructive controversy, group members have to follow the canons of rational argumentation (Johnson & Johnson, 1995b). Rational argumentation includes generating ideas, collecting relevant information, organizing it using inductive and

deductive logic, and making tentative conclusions based on current understanding. Rational argumentation requires that participants keep an open mind, changing their conclusions and positions when others are persuasive and convincing in their presentation of rationale, proof, and logical reasoning.

## Research Results

*He that wrestles with us strengthens our nerves, and sharpens our skill. Our antagonist is our helper.*

Edmund Burke, Reflection on the Revolution in

France

The research on constructive controversy has been conducted in the last 35 years by several different researchers in a variety of settings using many different participant populations and many different tasks within an experimental and field-experimental format (see Tables 2 and 3). For a detailed listing of all the supporting studies, see Johnson and Johnson (1979, 1989, 2000, 2003, 2007). All studies randomly assigned participants to conditions. The studies have all been published in journals (except for one dissertation), have high internal validity, and have lasted from one to sixty hours. The studies have been conducted on elementary, intermediate, and college age individuals. Taken together, their results have considerable validity and generalizability. A recent meta-analysis provides the data to validate or disconfirm the theory. Weighted effect sizes were computed for the 28 studies included in the analyses.

-----Insert Tables 2 And 3 About Here-----

## Quality Of Decision Making And Problem Solving

Effective decision making and problem solving includes higher-level reasoning, accurate understanding of all perspectives, creative thinking, and openness to influence (i.e., attitude change). The results of the research indicate that compared with concurrence-

seeking (ES = 0.68), debate (ES = 0.40), and individualistic efforts (ES = 0.87), constructive controversy tends to result in higher-quality decisions (including decisions that involve ethical dilemmas) and higher-quality solutions to complex problems for which different viewpoints can plausibly be developed. Skillful participation in a constructive controversy tends to result in (a) significantly greater ability to recall the information and reasoning contained in own and others' positions, (b) more skillfully transferring of this learning to new situations, and (c) greater generalization of principles learned to a wider variety of situations than do concurrence-seeking, debate, or individualistic efforts. The resolution of a controversy is likely to be in the direction of correct problem-solving, even when the initial conclusions of all group members are erroneous and especially when individuals are exposed to a credible minority view (as opposed to a consistent single view) even when the minority view is incorrect.

### **Cognitive Reasoning**

When difficult issues are being discussed and effective decisions are needed, higher-level reasoning strategies are needed. Controversy tends to promote more frequent use of higher-level reasoning strategies than do concurrence seeking (ES = 0.62), debate (ES = 1.35) or individualistic efforts (ES = 0.90). A number of studies on cognitive reasoning indicate that controversy is more effective than modeling and nonsocial presentation of information in influencing nonconserving children to gain the insights critical for conservation. In organizations where students are free to dissent and are also expected to listen to different perspectives, members tend to think more critically about civic issues and be more tolerant of conflicting views.

### **Perspective Taking**

Understanding and considering all perspectives is important if difficult issues are to be discussed, the decision is to represent the best reasoned judgment of all participants, and all participants are to help implement the decision. Constructive controversy tends to promote

more accurate and complete understanding of opposing perspectives than do concurrence seeking (ES = 0.91), debate (ES = 0.22), and individualistic efforts (ES = 0.86). Engaging in controversy tends to result in greater understanding of another person's cognitive perspective than the absence of controversy and individuals engaged in a controversy tend to be better able subsequently to predict what line of reasoning their opponent would use in solving a future problem than were individuals who interacted without any controversy. The increased understanding of opposing perspectives tends to result from engaging in controversy (as opposed to engaging in concurrence-seeking discussions or individualistic efforts) regardless of whether one is a high-, medium-, and low-achieving student.

### **Creativity**

High-quality decisions that subsume conflicting positions and perspectives often require creative thought. In constructive controversies, participants tend to invent more creative solutions to problems, be more original in their thinking, generate and utilize a greater number of ideas, generate more higher quality ideas, analyze problems at a deeper level, raise more issues, have greater feelings of stimulation and enjoyment, become more emotionally involved in and committed to solving the problem, and are more satisfied with the resulting decision. Being confronted with credible alternative views, furthermore, has resulted in the generation of more novel solutions, varied strategies, and original ideas.

### **Attitude Change About The Issue**

Open-minded consideration of all points of view is critical for deriving well reasoned decisions that integrate the best information and thought from a variety of positions. Participants must open-mindedly believe that opposing positions are based on legitimate information and logic that, if fully understood, will lead to creative solutions that benefit everyone. Involvement in a controversy tends to result in attitude and position change. Participants in a controversy tend to reevaluate their attitudes about the issue and incorporate opponents' arguments into their own attitudes. Participating in a controversy

tends to result in attitude change beyond that which occurs when individuals read about the issue and these attitude changes tend to be relatively stable over time (i.e., not merely a response to the controversy experience itself).

## **Motivation To Improve Understanding**

Effective decision making is typically enhanced by a continuing motivation to learn more about the issues being considered. Most decisions are temporary because they may be reconsidered at some future date. Continuing motivation to learn about an issue is critical for the quality of long-term decision making. Participants in a constructive controversy tend to have more continuing motivation to learn about the issue and come to the best reasoned judgment possible than do participants in concurrence seeking ( $ES = .75$ ), debate ( $0.45$ ), and individualistic efforts ( $ES = 0.64$ ). Participants in a controversy tend to search for (a) more information and new experiences (increased specific content) and (b) a more adequate cognitive perspective and reasoning process (increased validity) in hopes of resolving the uncertainty. There is also an active interest in learning the others' positions and developing an understanding and appreciation of them. Lowry and Johnson (1981), for example, found that students involved in a controversy, compared with students involved in concurrence seeking, read more library materials, reviewed more classroom materials, more frequently watched an optional movie shown during recess, and more frequently requested information from others.

## **Attitudes Toward Controversy**

If participants are to be committed to implement the decision and participate in future decision making, they must react favorably to the way the decision was made. Individuals involved in controversy liked the procedure better than did individuals working individualistically, and participating in a controversy consistently promoted more positive attitudes toward the experience than did participating in a debate, concurrence-seeking discussions, or individualistic decisions. Controversy experiences promoted stronger

beliefs that controversy is valid and valuable. The more positive the attitudes toward the process of making the decision, the more committed participants may feel to implement the decision.

## **Attitudes Toward Decision Making**

If participants are to be committed to implement the decision and participate in future decision making, they must consider the decision worth making. Individuals who engaged in controversies tended to like the decision making task better than did individuals who engaged in concurrence-seeking discussions (ES = 0.63).

## **Interpersonal Attraction And Support Among Participants**

Decision making, to be effective, must be conducted in ways that bring individuals together, not create ill-will and divisiveness. Within controversy there is disagreement, argumentation, and rebuttal that could create difficulties in establishing good relationships. Constructive controversy, however, has been found to promote greater liking among participants than did debate (ES = 0.72), concurrence-seeking (ES = 0.24), or individualistic efforts (ES = 0.81). Debate tended to promote greater interpersonal attraction among participants than did individualistic efforts (ES = 0.46). In addition, constructive controversy tends to promote greater social support among participants than does debate (ES = 0.92), concurrence-seeking (ES = 0.32), or individualistic efforts (ES = 1.52). Debate tended to promote greater social support among participants than did individualistic efforts (ES = 0.85).

## **Self-Esteem**

Participation in future decision making is enhanced when participants feel good about themselves as a result of helping make the current decision, whether or not they agree with it. Constructive controversy tends to promote higher self-esteem than does concurrence-seeking (ES = 0.39), debate (ES = 0.51), or individualistic efforts (ES = 0.85). Debate

tends to promote higher self-esteem than does individualistic efforts (ES = 0.45).

## **Structuring Constructive Controversies**

*Conflict is the gadfly of thought. It stirs us to observation and memory. It instigates invention. It shocks us out of sheeplike passivity, and sets us at noting and contriving...Conflict is a "sine qua non" of reflection and ingenuity.*

John Dewey, **Human Nature and Conduct: Morals Are**

### **Human**

In order to use constructive controversy to foster academic learning, you implement the following procedure (Johnson & R. Johnson, 1979, 1989, 1995b, 2000):

The task must be structured (a) cooperatively and (b) so that there are at least two well-documented positions (pro and con). Members are typically randomly assigned to groups of four. Each group is then divided into two pairs. The pairs are randomly assigned to represent either the pro or con position. The instructional materials are prepared so that group members know what position they have been assigned and where they can find supporting information. Positive interdependence is structured by assigning two group goals of producing a group report detailing the nature of the group's decision and its rationale and individually taking a test on both positions. The purpose of the constructive controversy is to maximize each member's learning. The constructive controversy procedure is as follows.

1. Research, Learn, And Prepare Position. Members are randomly assigned to groups of four, each of which is divided into two pairs. One pair is assigned the pro position and the other pair is assigned to the con position. Each pair is to prepare the best case possible for its assigned position by:

- a. Researching the assigned position and learning all relevant information.

Members are to read the supporting materials and find new information to support their position. The opposing pair is given any information members

find that supports its position.

b. Organizing the information into a persuasive argument that contains a thesis statement or claim (“*George Washington was a more effective President than Abraham Lincoln*”), the rationale supporting the thesis (“*He accomplished a, b, and c*”), and a logical conclusion that is the same as the thesis (“*Therefore, George Washington was a more effective President than Abraham Lincoln*”).

c. Planning how to advocate the assigned position effectively to ensure it receives a fair and complete hearing. Make sure both pair members are ready to present the assigned position so persuasively that the opposing participants will comprehend and learn the information and, of course, agree that the position is valid and correct.

2. Present And Advocate Position. Members present the best case for their assigned position to ensure it gets a fair and complete hearing. They need to be forceful, persuasive, and convincing in doing so. Ideally, more than one media will be used. Members are to listen carefully to and learn the opposing position, taking notes and clarify anything they do not understand.

3. Engage In An Open Discussion In Which There is Spirited Disagreement. Members discuss the issue by freely exchanging information and ideas. Members are to (a) argue forcefully and persuasively for their position (presenting as many facts as they can to support their point of view), (b) critically analyze the evidence and reasoning supporting the opposing position, asking for data to support assertions, (c) refuting the opposing position by pointing out the inadequacies in the information and reasoning, and (d) rebutting attacks on their position and presenting counter arguments. Members are to take careful notes on and thoroughly learn the opposing position. Members are to give the other position a “trial by fire” while following the norms for constructive controversy. Sometimes a “time-out” period will be provided so members can caucus with their partners and prepare new

- arguments. The supervisor may encourage more spirited arguing, take sides when a pair is in trouble, play devil's advocate, ask one group to observe another group engaging in a spirited argument, and generally stir up the discussion.
4. Reverse Perspectives. Members reverse perspectives and present the best case for the opposing position. Supervisors may wish to have members change chairs. In presenting the opposing position sincerely and forcefully (as if it was yours), members may use their notes and add any new facts they know of. Members should strive to see the issue from both perspectives simultaneously.
  5. Synthesize. Members are to drop all advocacy and find a synthesis on which all members can agree. Members summarize the best evidence and reasoning from both sides and integrate it into a joint position that is a new and unique. Members are to:
    - a. Write a group report on the group's synthesis with the supporting evidence and rationale. All group members sign the report indicating that they agree with it, can explain its content, and consider it ready to be evaluated. Each member must be able to present the report to the entire class.
    - b. Take a test on both positions. If all members score above the preset criteria of excellence, each receives five bonus points.
    - c. Process how well the group functioned and how its performance may be improved during the next constructive controversy. The specific conflict management skills required for constructive controversy may be highlighted.
    - d. Celebrate the group's success and the hard work of each member to make every step of the constructive controversy procedure effective.

While the groups engage in the constructive controversy procedure, supervisors monitor the learning groups and intervene to improve members' skills in engaging in each step of the constructive controversy procedure and use the social skills appropriately. At the end of each instructional unit, supervisors evaluate members' learning and give

feedback. The learning groups also process how well they functioned by describing what member actions were helpful (and unhelpful) in completing each step of the constructive controversy procedure and make decisions about what behaviors to continue or change.

## **Constructive Controversy And Democracy**

Thomas Jefferson and his fellow revolutionaries believed that free and open discussion should serve as the basis of influence within society, not the social rank within which a person was born. American democracy was, therefore, founded on the premise that "truth" will result from free and open-minded discussion in which opposing points of view are advocated and vigorously argued. Every citizen is given the opportunity to advocate for his or her ideas and to listen respectfully to opposing points of view. Once a decision is made, the minority is expected to go along willingly with the majority because they know they have been given a fair and complete hearing. To be a citizen in our democracy, individuals need to internalize the norms for constructive controversy as well as mastering the process of researching an issue, organizing their conclusions, advocating their views, challenging opposing positions, making a decision, and committing themselves to implement the decision made (regardless of whether one initially favored the alternative adopted or not). In essence, the use of constructive controversy teaches the participants to be active citizens of a democracy.

## **Summary**

Effective decision making and learning requires discussing difficult issues on which agreement may not be possible, but some accommodation must be worked out. Doing so is not easy, as often the discussions are seen as opportunities for advocacy with little interest in learning anything about other points of view. Those who do not have direct personal experience are seen as lacking expertise and having little to contribute. In order to discuss these difficult issues a procedure is needed that allows constructive discussions to take

place. One such procedure is constructive controversy.

In well structured controversies, participants make an initial judgment, present their conclusions to other group members, are challenged with opposing views, become uncertain about the correctness of their views, actively search for new information and understanding, incorporate others' perspectives and reasoning into their thinking, and reach a new set of conclusions. This process results in significant increases in the quality of decision making and problem solving (including higher-levels of cognitive and moral reasoning, perspective taking, creativity, and attitude change about the issue), motivation to learn more about the issue, positive attitudes toward the controversy and decision making processes, the quality of relationships, and self-esteem. While the constructive controversy process can occur naturally, it may be consciously structured in decision making and learning situations. This involves dividing a cooperative group into two pairs and assigning them opposing positions. The pairs then (a) develop their position, (b) present it to the other pair and listen to the opposing position, (c) engage in a discussion in which they attempt to refute the other side and rebut attacks on their position, (d) reverse perspectives and present the other position, and (e) drop all advocacy and seek a synthesis that takes both perspectives and positions into account. Engaging in the constructive controversy procedure skillfully provides an example of how conflict creates positive outcomes.

The educational use of academic controversy may be utilized in any grade level and in any subject matter. Engaging in the controversy process needs to pervade organizational life so that members develop considerable expertise in its use and incorporate the process into their identity. The possibility of this taking place is strengthened by the foundation of theory and research on which the controversy procedure is based.

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**Figure 1: Processes Of Controversy, Debate, Concurrency Seeking**

	Presented With Problem / Decision, Initial Conclusion	
	Present And Listen; Confronted With Opposing Position	
	Uncertainty, Cognitive Conflict, Disequilibrium	
Cooperative/Controversy	Competitive/Debate	Concurrency-Seeking
Epistemic Curiosity, Information Search	Closed Minded Rejection	Ignore, Avoid
Incorporation Of New Information, Adapt To Diverse Perspectives, New Conclusion	Rigid Adherence To Original Position	Quick Compromise To End Conflict

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**Table 1****Constructive controversy, Debate, Concurrence-Seeking, And Individualistic Processes**

<b>Constructive Controversy</b>	<b>Debate</b>	<b>Concurrence-Seeking</b>	<b>Individualistic</b>
Categorizing And Organizing Information To Derive Conclusions	Categorizing And Organizing Information To Derive Conclusions	Categorizing And Organizing Information To Derive Conclusions	Categorizing And Organizing Information To Derive Conclusions
Presenting, Advocating, Elaborating Position And Rationale	Presenting, Advocating, Elaborating Position And Rationale	Presenting, Advocating, Elaborating Position And Rationale	No Oral Statement Of Positions
Being Challenged By Opposing Views Results In Conceptual Conflict And Uncertainty About Correctness Of Own Views	Being Challenged By Opposing Views Results In Conceptual Conflict And Uncertainty About Correctness Of Own Views	Being Challenged By Opposing Views Results In Conceptual Conflict And Uncertainty About Correctness Of Own View	Presence Of Only One View Results In High Certainty About The Correctness Of Own Views
Epistemic Curiosity Motivates Active Search For New Information And Perspectives	Closed-Minded Rejection Of Opposing Information And Perspectives	Apprehension About Differences And Closed-Minded Adherence To Own Point Of View	Continued High Certainty About The Correctness Of Own Views
Reconceptualization, Synthesis, Integration	Closed-Minded Adherence To Own Point Of View	Quick Compromise To Dominant View	Adherence To Own Point Of View
High Achievement, Positive Relationships, Psychological Health	Moderate Achievement, Relationships, Psychological Health	Low Achievement, Relationships, Psychological Health	Low Achievement, Relationships, Psychological Health

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**Table 2: General Characteristics Of Studies**

<b>Characteristic</b>	<b>Number</b>	<b>Percent</b>
1970-1979	12	43
1980-1989	16	57
Random Assigned Subjects	22	79
No Random Assignment	6	21
Grades 1 – 3	7	25
Grades 4 – 6	7	25
Grades 10 – 12	2	7
College	10	36
Adult	2	7
Published In Journals	27	96
Dissertations	1	4
1 Session	12	43
2-9 Sessions	6	21
10-20 Sessions	8	29
20+ Sessions	2	7

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**Table 3**

**Meta-Analysis Of Academic Controversy Studies: Mean Effect Sizes**

<b>Dependent Variable</b>	<b>Controversy / Concurrence Seeking</b>	<b>Controversy / Debate</b>	<b>Controversy / Individualistic Efforts</b>
Achievement	0.68	0.40	0.87
Cognitive Reasoning	0.62	1.35	0.90
Perspective Taking	0.91	0.22	0.86
Motivation	0.75	0.45	0.71
Attitudes Toward Task	0.58	0.81	0.64
Interpersonal Attraction	0.24	0.72	0.81
Social Support	0.32	0.92	1.52
Self-Esteem	0.39	0.51	0.85

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**Table 2: Meta-Analysis Of Controversy Studies: Average Effect Size**

<b>Dependent Variable</b>	<b>Mean</b>	<b>sd</b>	<b>n</b>
<b>Quality Of Decision Making</b>			
Controversy / Concurrence Seeking	0.68	0.41	15
Controversy / Debate	0.40	0.43	6
Controversy / Individualistic Efforts	0.87	0.47	19
<b>Cognitive Reasoning</b>			
Controversy / Concurrence Seeking	0.62	0.44	2
Controversy / Debate	1.35	0.00	1
Controversy / Individualistic Efforts	0.90	0.48	15

<b>Perspectives-/ Taking</b>			
Controversy / Concurrence Seeking	0.91	0.28	9
Controversy / Debate	0.22	0.42	2
Controversy / Individualistic Efforts	0.86	0.00	1
<b>Motivation</b>			
Controversy / Concurrence Seeking	0.75	0.46	12
Controversy / Debate	0.45	0.44	5
Controversy / Individualistic Efforts	0.71	0.21	4
<b>Attitudes</b>			
Controversy / Concurrence Seeking	0.58	0.29	5
Controversy / Debate	0.81	0.00	1

Debate / Controversy / Individualistic Efforts	0.64	0.00	1
<b>Interpersonal Attraction</b>			
Controversy / Concurrence Seeking	0.24	0.44	8
Controversy / Debate	0.72	0.25	6
Controversy / Individualistic Efforts	0.81	0.11	3
Debate / Individualistic Efforts	0.46	0.13	2
<b>Social Support</b>			
Controversy / Concurrence Seeking	0.32	0.44	8
Controversy / Debate	0.92	0.42	6
Controversy / Individualistic Efforts	1.52	0.29	3

Debate / Individualistic Efforts	0.85	0.01	2
<b>Self-Esteem</b>			
Controversy / Concurrence Seeking	0.39	0.15	4
Controversy / Debate	0.51	0.09	2
Controversy / Individualistic Efforts	0.85	0.04	3
Debate / Individualistic Efforts	0.45	0.17	2

Note: For a more complete analysis, see Johnson & Johnson (1995).

## Table 2: Constructive Controversy Procedure

Your **overall goals** are to learn all information relevant to the issue being studied and ensure that all other group members learn the information, so that (a) your group can write the best report possible on the issue and (b) all group members achieve high scores on the test. The constructive controversy procedure will help you achieve these goals. The procedure is as follows.

1. **Research, Learn, And Prepare Your Position:** Your group of four has been divided into two pairs. One pair has been assigned the pro position and the other pair has been assigned to the con position. With your partner, you are to prepare the best case possible for your assigned position by:

a. **Researching your assigned position and learning all relevant information.**

Read the materials supporting your position. Find more information in the reference materials to support your position. Give the opposing pair any information you find that supports its position.

b. **Organizing the information into a persuasive argument** that contains a thesis statement or claim (“*George Washington was the most effective American President*”), the rationale supporting your thesis (“*He accomplished a, b, and c*”), and a logical conclusion that is the same as your thesis (“*Therefore, George Washing was the most effective American President*”).

c. **Planning how to advocate your assigned position** effectively to ensure it receives a fair and complete hearing. Make sure both you and your partner are ready to present your assigned position so persuasively that the opposing pair will comprehend and learn your information and, of course, agree that your position is valid and correct.

2. **Present And Advocate Your Position:** Present the best case for your assigned position to the opposing pair to ensure it gets a fair and complete hearing. Be forceful, persuasive, and convincing in doing so. Use more than one media. Listen carefully to

and learn the opposing position. Take notes and clarify anything you do not understand.

3. **Engage In An Open Discussion In Which There is Spirited Disagreement:**

Openly discuss the issue by freely exchanging information and ideas. Argue forcefully and persuasively for your position, presenting as many facts as you can to support your point of view. Listen critically to the opposing pair's evidence and reasoning, probe and push the opposing pair's thinking, ask for data to support assertions, and then present counter arguments. Take careful notes on and thoroughly learn the opposing position. Compare the strengths and weaknesses of the two positions. Refute the claims being made by the opposing pair, and rebut the attacks on your position. Give the other position a "trial by fire." Follow the specific rules for constructive controversy.

Sometimes a "time-out" period will be provided so you can caucus with your partner and prepare new arguments. Your supervisor may encourage more spirited arguing, take sides when a pair is in trouble, play devil's advocate, ask one group to observe another group engaging in a spirited argument, and generally stir up the discussion. Remember, this is a complex issue and you need to know both sides to write a good report. Make sure you understand the facts that support both points of view.

4. **Reverse Perspectives:** Reverse perspectives and present the best case for the opposing position. Change chairs with the other pair. Present the opposing pair's position as if you were they. Use your notes to do so. Be as sincere and forceful as you can. Add any new facts you know of. Elaborate their position by relating it to other information you have previously learned. Strive to see the issue from both perspectives simultaneously. The opposing pair will do the same.

5. **Synthesize:** Drop all advocacy. Find a synthesis on which all members can agree. Summarize the best evidence and reasoning from both sides and integrate it into a joint position that is a new and unique solution. Change your mind only when the facts and rationale clearly indicate that you should do so.

- a. Write a group report on the group's synthesis with the supporting evidence and

- rationale. All group members sign the report indicating that they agree with it, can explain its content, and consider it ready to be evaluated. Organize your report to present it to your entire class.
- b. Take a test on both positions. If all members score above the preset criteria of excellence, each receives five bonus points.
  - c. Process how well the group functioned and how its performance may be improved during the next constructive controversy. The specific conflict management skills required for constructive controversy may be highlighted.
  - d. Celebrate your group's success and the hard work of each member to make every step of the constructive controversy procedure effective.

## Table 3: Constructive Controversy Rules

1. I am critical of ideas, not people. I challenge and refute the ideas of the opposing pair, while confirming their competence and value as individuals. I do not indicate that I personally reject them.
2. I separate my personal worth from criticism of my ideas.
3. I remember that we are all in this together, sink or swim. I focus on coming to the best decision possible, not on **winning**.
3. I encourage everyone to participate and to master all the relevant information.
4. I listen to everyone's ideas, even if I don't agree.
5. I restate what someone has said if it is not clear.
6. I differentiate before I try to integrate. I first bring out **all** ideas and facts supporting both sides and clarify how the positions differ. Then I try to identify points of agreement and put them together in a way that makes sense.
7. I try to understand both sides of the issue. I try to see the issue from the opposing perspective in order to understand the opposing position.
8. I change my mind when the evidence clearly indicates that I should do so.
9. I emphasize rationality in seeking the best possible answer, given the available data.
10. I follow the **golden rule of conflict**. The golden rule is, act towards your opponents as you would have them act toward you. I want the opposing pair to listen to me, so I listen to them. I want the opposing pair to include my ideas in their thinking, so I include their ideas in my thinking. I want the opposing pair to see the issue from my perspective, so I take their perspective.

Constructive Controversy

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