

LEADERSHIP STYLE AND SELF-EFFICACY PREDICT DECISION-COPING

PATTERNS: Great Leaders, Bad Decisions and Serious Consequences.

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It's been emotional!

Abstract

Organisations usually rely upon groups of experienced, qualified and motivated individuals to make strategic decisions. Many psychological factors, including social influence, leadership and self-efficacy, shape decision-making. This research project examined interactions of Leadership Style, Self-efficacy and Decision-coping Patterns, amongst a sample of 66 organisational decision-makers (M=35, F=31), and showed that the best leaders employ the best decision-making strategy. While groups are believed to produce more rational decisions, than individuals, recent high profile examples demonstrate that they frequently produce flawed decisions, with terrible consequences. Alarming, many participants report that dissent & critical thinking are discouraged, and relatively few have received decision-making training from employers. Nevertheless, precedent illustrates how problems, within an organisational system, will repeat if the systemic causes aren't addressed. This study concludes that organisational leaders should receive training, from Social Scientists, on psychological factors which influence decision-making, how to recognise symptoms and inoculate group members against the maladaptive behaviours described within.

Keywords: Bank crisis, Decision making, Groupthink, Leadership, NASA, Precedent, Self-efficacy.

LEADERSHIP STYLE AND SELF-EFFICACY PREDICT DECISION-COPING STRATEGIES: Great Leaders, Bad Decisions And Significant Consequences.

Governments, corporations and organisations rarely allow one individual to make important decisions on their behalf. Discretion to make such decisions is usually delegated to permanent working groups or temporary project teams. Groups of qualified, experienced and highly motivated individuals can share their knowledge to avoid the biases and extreme decisions to which an individual may be susceptible (Baron, Branscombe & Byrne, 2009, p. 408). Groups are believed to behave more conservatively and considered less likely to make irrational decisions, than individuals (Passer, Smith, Holt, Bremner, Sutherland & Vliek, 2009, p. 629). Group decision-making is a critical organisational process (Riggio, 2009 p. 328). But are there situations in which group behaviour contributes to flawed, irrational or even dangerous decisions?

Counterintuitively, expert groups often produce flawed decisions, real-world examples include the military (Pearl Harbour, Bay of Pigs), science (NASA, Challenger & Columbia shuttle-disasters) and the Irish banking crisis (Leadership and Decision-making failures). Research by social psychologists, including Asch, Festinger & Carlsmith, Milgram, Janis, Myers & Lamm and Darley & Latane demonstrates that individuals are inclined to extreme or irrational behaviour, particularly when in stressful situations. Individuals can influence the behaviour of their group, and groups can influence the behaviour of individual members. Normative Social Influence persuades individuals to conform to group behaviour to *“obtain the rewards that come from being accepted by other people while at the same time avoiding their rejection”*. Furthermore, Informational Social Influence encourages

individuals to conform with others, as it's believed that they have "*accurate knowledge and that what they are doing is right*" (Passer *et. al.*, 2009, p. 624).

Asch's Studies of Independence and Conformity (1956) illustrates how easily an individual may be influenced to conform to preferences expressed by a temporary group, although the unanimous majority had answered incorrectly. Festinger & Carlsmith (1959) explained how the individual experiences cognitive dissonance when their overt behaviour conflicts with their private opinion. Consequently, the individual is likely to re-align their private opinion to echo their behaviour, thereby reducing internal discord (1959, p. 208). Reporting upon the destructive effects of obedience, Milgram examined whether personality, or the situation, is a more powerful predictor of obedience and described the undesirable influence of mild encouragement, on individual behaviour. Although distressed by their experience, 65% of participants did administer the most powerful shock-level to the learner subject (1963, p. 375-6). Milgram's findings demonstrate the influence of even mild encouragement on individual decision-making and behaviour. Darley & Latane explain how, in ambiguous situations, group members perceive that responsibility to respond to an emergency is diffused among group members (1968, p. 377). Furthermore, Darley & Latane examined behaviour when the individual is exposed to direct physical threat. While in the control condition, 75% reported the threat (smoke) within two minutes, in the experimental conditions just 12% "*reported the smoke during the entire experimental period*" (1968, p. 218), further demonstrating the effect of social influence, in ambiguous situations.

Janis' Groupthink theory describes the situation, symptoms and behaviour to which some groups fall victim. Passer *et. al.* cite the NASA space-shuttle disasters, Challenger and Columbia, as examples in which Groupthink is believed to have contributed to flawed decision-making, resulting in the loss of 14 crew members (2009, p.630). Groupthink may be defined as "*the tendency of the members of highly cohesive groups to assume that their decisions can't be wrong, that all members must support the group's decisions strongly and that information contrary to it should be ignored*" (Baron *et. al.*, 2009, p. 462). Developing on prevailing '*risky-shift*' literature, Myers and Lamm explained the effect of group discussion on attitude and behaviour, arising from a combination of Interpersonal Comparisons and Normative Social Influence (1976, p.613-618). Baron *et. al.* describe Polarisation as the tendency of groups to adopt more extreme positions, than were originally held by individual group members, following group discussion (2009, p. 462). Group Polarisation theory runs contrary to the popularly held belief that groups are more cautious than individuals. These findings and theories clarify some of the psychological forces which operate in social settings and go some way to explain why individuals, working in groups, often end up making flawed, irrational or even dangerous decisions.

This research project will examine, from a psychology perspective, human factors that contributed to the flawed decision-making which triggered the Irish banking crisis. To date researchers have predominantly focussed on technical, rather than human factors. There is no known research into psychological factors which contributed to the crisis. Therefore, this study will complement existing research, fill a gap in the literature, and suggest areas for future research. Additionally, the current study proposes that organisational decision-makers should receive continuous professional development in respect of the psychological factors

which influence group decision-making. The three Government reports which are referenced were commissioned by the Minister for Finance:

- A Preliminary Report on The Sources of Ireland's Banking Crisis (Regling, K. & Watson, M, 2009).
- The Irish Banking Crisis: Regulatory and Financial Stability Policy 2003-2008 (A Report to the Minister for Finance by the Governor of the Central Bank, 2010).
- Misjudging Risk: Causes of the Systemic Banking Crisis in Ireland: Report of the Commission of Investigation into the Banking Sector in Ireland. (Nyberg, P. 2011).

The variables Leadership Style and Self-efficacy will be studied to see if they predict Decision-coping Strategy. For example, do the *best* leaders employ the *best* decision-coping strategy? Additionally, the role of Ethics will be considered as an area for future studies. Finally, this study will explore whether precedent demonstrates that flawed decision-making processes may re-emerge, despite previous in-depth investigation, personnel replacement and strategic re-organisation.

Context

“History is replete with examples of what happens when bankers, authorities and others have come to believe ‘this time it’s different’.” (Nyberg, 2011, p.98)

Regling & Watson *“discusses the role of markets, policies and institutions but not the individuals”* (2009, p.4). However, it is acknowledged that significant errors of judgement by leadership contributed to the Irish crisis (2009, p.29). A culture of weak risk-management, poor credit assessment and the routine overriding of internal policies prevailed (2009, p. 39). The research summarised clearly demonstrates the influence that leaders yield, for better or worse, over followers, organisational culture, norms and strategy. Therefore, Leadership will be examined in the current research project.

Nyberg discussed the role of Groupthink, within the industry, to explain why so many Irish banks simultaneously engaged in flawed decision-making (2011, p.7). Interviewees explained how conformity to team values was expected. They reported how the presence of a ‘strong personality’ in leadership roles influenced behaviour and how dissent resulted in sanctions against the individual (2011, p.48-49). Groupthink occurred not only within the institutions but also between them (2011, p. 86). In his ‘ubiquity’ Groupthink model, Baron (2005, p.34) proposes low self-efficacy as an alternative antecedent condition, to Janis’ original model. Low self-efficacy occurs where there is an absence of confidence in their decision-making ability, amongst group members. This will be discussed further in the next section. Accordingly, in view of the effect of self-efficacy on individual performance and resistance to Groupthink, Self-efficacy will be examined in the current research project.

The Governor of the Central Bank (CBI) examined the operation of the CBI and Financial Regulator (FR) between 2003 and 2008. While the CBI raised concerns over unethical behaviour within Banks and Building Societies (2010, p.48 & 56), regulation relied upon the integrity of the banks' management (2010, pp's. 45, 46 & 58). The CBI found that apart from Iceland, the performance of the Irish banking system was the poorest of any other banking system during the current crisis (2010, P.19). Consequently, the current research project proposes that Ethics should be considered as an area for future research.

In summary, the three official reports, which investigated the banking crisis, focus upon technical and procedural events, rather than the human factors, that contributed to the crisis. Of the human factors that were reported the primary causes were leadership, Groupthink and unethical behaviour. Each of these factors will now be reviewed in the context of related psychological research.

Leadership

Leadership may be defined as “the ability to guide a group toward the achievement of goals”. Leaders may be formally appointed, alternatively, effective leaders may emerge informally, as they possess characteristics that are considered important by the group, e.g. attitude, experience or knowledge (Riggio, 2009, p. 342). Leaders may be task oriented and / or relationship oriented. Characteristics of effective leaders include effective communication, high quality decision-making, delegation and leadership self-efficacy. Effective leaders set challenging objectives, provide positive feedback and adapt to changing situations (Riggio, p.347-348).

Baron *et. al.* describe leadership as “influencing others by establishing a direction for collective effort and then managing the collective activities needed to move in that direction” (2009, p. 449). Psychology offers many leadership theories. Universalist theories are the earliest and simplest examples, they identify one primary trait, or group of traits, held by effective leaders that set them apart from other people. However, as researchers failed to agree upon a short list of essential traits required of all great leaders, there is little evidence to support this theory (Riggio, 2009 p. 343 : Baron *et. al.* p. 449). The absence of evidence, to support Universalist theories, prompted researchers to examine the behaviours of effective leaders, resulting in the development of Behavioural Theories of Leadership (Riggio, 2009, p. 345; Baron *et. al.* p. 451). Behavioural theories focus on behaviours common to effective leaders, primarily examining performance across two dimensions;

- Task: Refers to how leaders focus on getting the job done.

- People: Focus on establishing good relations with subordinates, and developing mutual respect and trust, to achieve objectives.

These leadership characteristics may be measured, and used to identify an individual's preferred leadership style, using self-report questionnaires. This study will use the Blake and Mouton Managerial Grid which employs an 18 item questionnaire to illustrate the participant's preferred leadership style, on a grid. Participants are classified within one of four categories, Impoverished, Country-Club, Authoritarian or Team-leader, of which Team-leader is considered the most effective.

Other leadership theories refer to Charismatic, Transformational and Transactional leadership (Riggio, 2009, p.361). Charismatic leaders possess exceptional traits that trigger loyalty and enthusiasm amongst followers, (Baron *et. al.*, 2009, p. 452). Transformational leaders modify their followers' values, beliefs and attitudes to produce a common vision. Transactional leadership focuses on an exchange between the leader and followers, for example praise, consideration or money in return for target behaviour, (Riggio, 2009, p. 363). Citing Waldman *et. al.* (2001), Baron *et. al.* describe how Charismatic or Transformational leaders are more effective in uncertain or rapidly changing environments, whereas Transactional leaders may be more effective in a stable environment (2009, P. 453). Bass, Avolio and Jung's exploration of military leadership examined whether leadership ratings, of 72 light-infantry platoon leaders and sergeants, by units operating under high stress and uncertainty predicted unit performance. Previous studies confirmed that transformational leadership enhances transactional leadership, in terms of performance. Additionally, in

contrast with previous studies, it was demonstrated that both transformational and transactional leadership styles did equally predict unit performance (2003, p. 215).

Current research continues to emphasise the influence of leadership style on individual & team performance and on leaders themselves. Hamstra, Van Yperen, Wisse & Sassenberg studied 120 leaders to see whether leadership style predicts employee achievement goals. Transformational leadership was shown to predict employee performance relating to learning & development and mastering relevant aptitudes. Furthermore, transactional leadership predicted individual employee performance goals, when compared with others. In contexts requiring professional development, transformational leadership may be employed. However, in competitive situations, transactional leadership may be more appropriate (2014, p. 413 - 425). A recent study of two large companies of soldiers, has also shown that transformational leadership enhances performance, by improving followers' self-efficacy (Hannah, Schaubroeck, & Peng, 2016, p. 252-266).

Whilst the research outlined above predominantly focuses on the effects of leadership style upon followers, recent studies have examined the effect upon the leaders themselves. For example, Lanaj, Johnson, & Lee (2016, p. 237-251) argue that transformational leadership behaviours contribute to the fulfilment of a leader's daily needs. Consequently, by engaging in transformational behaviours, leaders experience an improvement in their daily affect to a greater extent than if they engaged in transactional behaviours. Therefore, as Regling & Watson identify Leadership as having contributed to the crisis, and given the influence of leadership over followers' behaviour, organisational culture, norms and strategy,

Leadership will be examined in the current study. The Blake and Mouton Managerial Grid will be used to identify organisational leaders' preferred leadership style. In particular relationships between leadership styles, self-efficacy and decision-coping strategies will be discussed.

Groupthink (Antecedent: Self-Efficacy)

As outlined above, Nyberg describes how Groupthink influenced bank leadership behaviour (2011, p. 7 – 9, 48 – 49, 87 and 94). Groupthink may occur where, at the outset, the leader expresses a preference for a particular result. Due to the high degree of group-cohesiveness, and high-stress to reach agreement, group members are predisposed to achieving consensus. Because the group is insulated from out-group experts, it has no opportunity to examine alternatives. Groupthink persuades group members to conform to group norms. Some members prevent negative information from reaching the group. Others may fail to express their concerns. These behaviours develop an illusion of unanimity, whereby group members believe they are all in agreement and the leader therefore has confidence in their decision reinforced (Baron et al, 2009, p. 409 – 410; Passer et al. 2009, p. 629 – 630).

Research describes how Groupthink has contributed to flawed decision-making by highly qualified, experienced and motivated leaders. For example, Scharff explains the WorldCom Accounting fraud in Groupthink terms. WorldCom reported accounting irregularities of \$11bn, which resulted in fines of \$750m by the Securities and Exchange Commission (SEC). A SEC report described how the CEO promoted a culture of team-work and pressure toward “*making the numbers, above all else*” (2005, p. 115), which encouraged the fraud. Burnette, Pollack and Forsyth’s study of the 1996 Mount Everest Disaster examined contributory factors that resulted in the deaths of five climbers and expanded upon Janis’s Groupthink theory. Where a temporary group is formed to achieve a specific task, and operates under extreme pressure, high *task-cohesion* may replace *group-cohesion*, resulting in flawed decision-making (2011, p. 29 - 30). Furthermore, Baron proposes a ‘ubiquity’

Groupthink model, arguing that “*concurrence seeking, illusion of consensus, self-censorship and in-group defensiveness are far more widespread than he (Janis) envisioned*”, (2005, p.12). Baron proposes alternative antecedents (2005, p. 32 – 35):

- **Low Self-Efficacy:** Group-members lack confidence in their ability to reach satisfactory resolution and fear serious sanctions when challenging group norms.
- **Social Identification:** Group is linked by some common purpose / history.
- **Salient Norms:** Discussion produces a dominant group norm.

Baron, argues that self-efficacy is influenced by “decisional complexity, fatigue, priming, low self-confidence or negative social feedback”. Citing previous research, Baron explains that high self-efficacy reduces or eliminates social influence and suppression of dissent (2005, p.34).

Groupthink, conformism and success based optimism resulted in increasing risk tolerance and reduced lending standards increased the probability of a banking crisis (Nyberg, 2011, p. 7-9). Significant numbers of bankers subsequently described how directive leadership exerted a pressure to conform. Insulation from external influence hindered critical thinking. Disciplinary action was threatened and there was “a general denial of the extent of the risk until the very end” (2011, p. 48). Groupthink was evident amongst senior management, in respect of their resistance to contrarian views. This was especially true when an overall policy decision had already been made (2011, p. 87).

Given the role of Groupthink in the Irish crisis and Baron's proposal (2005, p.34) that low self-efficacy is an antecedent condition to Groupthink, General Self-Efficacy will be examined in this study. Baron *et. al.* define self-efficacy as "the belief that we can achieve a goal as a result of our own actions" (2009, p. 127). For example, in their study, which entailed participants undertaking a strenuous activity, Bandura and Cervone found that stronger self-efficacy, for goal achievement, and greater dissatisfaction, with substandard task performance, predicted a subsequent increase in effort and performance improvement (1983, p. 1017-1028). Citing Bandura (1997), Johri & Misra describe self-efficacy as the "belief in one's capabilities to organize and execute the course of action required to produce given attainments" (2014, p. 21). Johri & Misra's model proposes that self-efficacy has a positive effect on the employee's harmonious passion for work. They further propose that passion for work is positively related to workplace happiness and psychological wellbeing (2014, p. 29). Lucke and Furtner examined the effects of self-leadership, in soldiers within the Austrian Army. Self-leadership is a technique which enhances self-efficacy, improves performance and reduces strain. Findings demonstrate that, self-leadership techniques did contribute to increased self-efficacy and improved overall performance. Furthermore, significant to marginal reductions in perceived strain were recorded (2015, 323).

Considering low self-efficacy as a Groupthink pre-condition, as proposed by Baron, and given the self-efficacy's influence on work passion, strain resistance and performance enhancement, relationships between leadership styles, self-efficacy and decision-coping will be discussed. This study will employ the Generalized Self-Efficacy scale (Schwarzer, R., & Jerusalem, M., 1995), which is a 10 item questionnaire to illustrate the participant's self-efficacy score.

Decision-making

As outlined above, Leadership and Self-Efficacy affect individual and group behaviour in organisational situations. This study will examine their relationship to decision-making strategies and consider existing psychological theory related to decision-making. Riggio describes four organisational decision-making styles. Decisions made solely by the leader are described as 'Autocratic'. Consultative decision-making occurs where the leader seeks group members' input, whilst retaining the final say. Democratic decision-making occurs where all group members express opinions, & suggest alternatives, and the decision is made by majority vote. Finally, consensus based decision-making requires 100% agreement of group members, (2009, P. 329 – 330).

Postmes, Spears & Cihangir compared groups whose norms prioritised consensus-maintenance versus groups whose norms prioritised critical-thinking. Demonstrating that group norms heavily influence decision-making, it was found that critical-thinking improved group decision-making (2001, p.918). Kahneman explains that most behaviour is governed by System 1, the brain's fast-acting and intuitive decision-making process, which predominantly yields successful results. Furthermore, even when endorsed by System 2 (deliberative process), most behaviour originates within System 1. Citing Haidt (2001), Kahneman illustrates this with an image of the intuitive dog wagging the rational tail (2003, p. 697). Correspondingly, Reyna & Lloyd argue that experts are better at discriminating risk probabilities by processing less information. Fuzzy-trace theory proposes that humans have 'fuzzy-processing' aptitudes, which produce superior decisions from less information. This is because human decision-making is not a computational activity (2006, p. 193). Similarly, Mikels, Maglio, Reed & Kaplowitz argue that both affective and deliberative processes

contribute to decision-making. Furthermore, that, contrary to traditional views, affective processes is more successful for complex choices, in certain situations. They conclude that “when the going gets tough, go with your gut—but with the qualification that one should not overthink their decision”, (2011, p. 751 – 752).

Research demonstrates that individuals do have preferred decision-coping, strategies. Individuals’ preferred strategy may be identified using a scale. This study will use ‘The Melbourne Decision Making Questionnaire’ (Mann, Burnett, Radford and Ford, 1997), a 22 item questionnaire which categorises respondents across four dimensions: Vigilance, Buck-Passing, Procrastination and Hypervigilance. The scale identifies one adaptive decision-coping pattern (Vigilance), the remaining three are considered maladaptive.

Ethics

According to the Governor of the Central Bank, Irish bank regulation relied upon senior managements' integrity (2010, pp's. 45, 46 & 58). However, recent examples demonstrate the frequency with which seemingly unimpeachable organisations engage in unethical behaviour. For example, child sex-abuse was committed by the Penn State University head football-coach. Law enforcement and university officials were aware of the abuses for a decade, yet failed to stop the perpetrator (Alderfer, 2013, p.117). The News of the World newspaper was accused of hacking into the personal voice-mail messages of over 4,000 people. Hyundai and Kia have had fines of \$350m imposed by the Environmental Protection Agency, for falsifying greenhouse-gas emissions. Volkswagen fitted c 11m vehicles world-wide with software designed to cheat emissions tests. FIFA corruption allegations have seen 30 executives arrested in connection with criminal schemes involving over \$200m.

Many factors, including physiological, cultural and social influence behaviour which may be deemed unethical, immoral or illegal. Humans are highly social beings, placing great emphasis on remaining within social groups. Therefore, people minimise the probability of exclusion, as exclusion triggers neural activity which has adverse psychological consequences (Passer *et. al.*, 2009, p. 632). Kouchaki and Wareham (2014, p.2) argue that workplace exclusion increases the probability that an employee will engage in unethical behaviour. Thau, Derfler-Rozin *et. al.* (2015, p.100) explain that when faced with exclusion, some individuals will engage in unethical behaviour to reinforce their importance to the group. Mazar, Amir & Ariely describe a *dishonesty range* which enables people to participate in some degree of dishonesty, while preserving a positive self-view (2008, p. 633 – 634). Gamliel and Peer describe how, consistent with *motivation crowding theory*, dishonesty did

not reduce due to the risk of getting caught cheating (2013, p. 1282 – 1286). Consequently, ethics will be examined using the ‘Ethics Position Questionnaire’ (Forsyth, 1980), a 20 item survey which uses a 5 point Likert scale to illustrate the participant’s Ethics Position across two dimensions (Idealism-Pragmatism and Relativism). As ethics position influences the behaviour of organisational leaders, it will be proposed as an area for future research, in context of organisational decision-making.

Rationale: The Incremental Descent into Poor Judgement

“The Irish State has invested €63 billion into the banking system”, (Woods and O’Connell, 2012, p.98).

So, why is this research important? A banking crisis couldn’t re-occur could it? Is there precedent which proves that flawed decision-making processes may re-emerge within organisations, despite in-depth investigation, personnel replacement and strategic re-structuring?

On January 28th 1986, the Challenger Space Shuttle was destroyed 73.1 seconds after take-off, with the loss of all seven astronauts, following a catastrophic O-ring failure. On February 1st 2003 the Columbia Space Shuttle was destroyed on re-entry, with the loss of its’ seven crew, following a foam strike which had occurred 81.9 seconds after take-off. While the shuttles were destroyed by different mechanical failures, the report of the Columbia Accident Investigation Board (CAIB) *“observed that there were ‘echoes’ of Challenger in Columbia”* (2003, p. 195). As Dr Diane Vaughan, testified during the CAIB public hearings, problems within an organisational system will repeat, if the causes within the system aren’t addressed (para. 4 - 6).

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Comparisons may be drawn, between failures at NASA and the Irish banking sector, in the period preceding their distinct crises. Following Challenger, the period preceding the

Columbia disaster saw the re-emergence of “*schedules, production pressures, deadlines and cost efficiency goals*” which became as important as safety objectives, (CAIB, 2003, p.198-199). NASA’s culture encouraged risk-tolerance as, in both Challenger and Columbia, known threats were deemed acceptable risks. Similar pressures, to deviate from traditional banking principles preceded the bank crisis. Nyberg argues that behaviour was influenced by “*the need to achieve similar profitability as competitors as a result of shareholder pressure*” (2011, p.8). Comparisons with peer banks influenced behaviour, “*regardless of traditional objective risks*” (2011, p. 48). Furthermore, flying with known flaws became acceptable and routine to NASA. Decision-making on previous O-ring and foam-strike incidents normalised anomalies over time (CAIB, 2003, p. 195, 200 & 203). Similarly, Watson & Regling describe systemic problems within the banks caused by poor risk management, which normalised policy exceptions over time (2009, p. 6, 39 & 45).

NASA’s normalisation of deviance diminished its’ risk perception. O-ring erosion and foam strikes were considered normal occurrences (CAIB, 2003, p. 196, 197, 200 & 203). However, where a design flaw is not predicted, recurring anomalies should act as a warning (Vaughan, CAIB public hearing, testimony, para. 72). Similarly, Nyberg describes how banks frequently and materially deviated from policies, thereby incrementally increasing risk tolerance (Nyberg, 2011, p.31, 32 & 46). Additionally, a significant cultural change had occurred within NASA. During the Challenger and Columbia Shuttle era, “instead of having to prove that it was safe to fly, they were asked to prove that it was un-safe to fly” (CAIB, 2003, p. 200 & 201). Similarly, Nyberg argues that “the lending culture was such that when applications were problematic, the mind-set was “there is a ‘yes’ in there somewhere” (2011, p.32). Finally, the CAIB report describes Groupthink behaviours, including Directive

Leadership, Task Cohesion, Self-Censorship, Illusion of Invulnerability, Mindguards and an Illusion of Unanimity (2003, P. 197 – 202). Nyberg illustrates similar Groupthink behaviours, including Directive Leadership, Group Cohesion, Mindguards & Self-Censorship which preceded the bank crisis. (2011, p. i, 7, 8, 9, 48).

Similarities between NASA Shuttle disasters and the banking crisis explain how culture and situations which resulted in catastrophic decision-making may re-emerge, following in-depth investigation, personnel replacement and strategic re-organisation, triggering what may be described as “*an incremental descent into poor judgement*” (Vaughan, CAIB public hearings, testimony, para. 14). This analogy justifies the current research project and makes a compelling argument that current and future leaders should receive continuous professional development, in respect of group decision-making.

Summary

This study reviews the effect of social influence described by Social Psychologists and examines Leadership, Self-Efficacy and Decision-coping Patterns to identify whether, or not, predictive relationships exist between them. Additionally, it is recommended that future research should consider whether the individual's Ethics Position predicts their preferred Decision-coping Pattern. Finally, by demonstrating that flawed decision-making processes may re-emerge, despite previous in-depth investigation, personnel replacement and strategic re-organisation, following earlier decision-making disaster, this study argues that decision-making must not be left to chance. Arising from the findings, it is proposed that organisational leaders should receive training, from Social Scientists, on the psychological factors which influence individual and group decision-making. Also, how to recognise maladaptive symptoms and suggest remedies to inoculate group members against the effects of the psychological factors described in this review.

Hypotheses

Hypothesis 1: That the best leaders employ the best decision-making strategy. That *People & Task* orientation and *Self-Efficacy* predict the *Vigilance* adaptive Pattern for Coping with Decisional Conflict.

Hypothesis 2: That *People & Task* orientation and *Self-Efficacy* predict the *Buck-Passing* maladaptive Pattern for Coping with Decisional Conflict.

Hypothesis 3: That *People & Task* orientation and *Self-Efficacy* predict the *Procrastination* maladaptive Pattern for Coping with Decisional Conflict.

Hypothesis 4: That the worst leaders employ sub-optimal decision-making strategy. That *People & Task* orientation and *Self-Efficacy* predict the *Hypervigilance* maladaptive Pattern for Coping with Decisional Conflict.

Using Cohen's-d Power Table (1992). Applying .05 significance level, .8 Power and a Medium Effect Size a sample of c 85 will be sought.

Methodology

Participants

While probability sampling would be ideal, for practical reasons this study employed non-probability sampling. As participants are required to have organisational decision-making experience, purposive sampling was used. This should increase the probability that the findings will be representative. While acknowledging that it may be more difficult to draw firm conclusions about an overall population, it is believed that this approach is justifiable as this study is exploratory.

An a priori power analysis was conducted using Cohen's-d Power Table (1992). Applying .05 significance level, .8 Power and a Medium Effect Size a sample in excess of 85 was sought, to allow for attrition. However, given the specialist nature of the population of interest, a smaller sample size, of 66 participants, was ultimately employed. 31 females and 35 males responded to the surveys. Participants must be over 18 years of age and able to provide informed consent. In view of the sample size, to protect anonymity individual ages were not recorded, participants confirmed the range within which their age fell. E.g. 21–30 years and 31–40 years, 41-50 years and 51 years & above. c 70% of participants were aged between 31 and 50 years. A convenience sample was obtained through colleagues, family, social circles, college and through snowball sampling. Individuals were invited to participate on the basis of their experience of group decision-making, on behalf of an organisation, for example in a supervisory, management or project team role. Participants were not incentivised to partake in the study.

Design

As the research is concerned with real-world application, the design is non-manipulative, to limit the potential for the introduction of a confounding variable, maintain ecological-validity, and to increase probability that findings will generalise. This study is a quantitative design which examined whether, or not, the variables *Leadership Style* and *Self-Efficacy* predict the variable *Patterns for Coping with Decisional Conflict*. *Ethics Position* was also examined, with a view to making a recommendation in respect of potential for future research.

- Predictor variables: *Leadership Style* and *Self-Efficacy*.
- Criterion variable: *Patterns for Coping with Decisional Conflict*.

This design should produce results which enable researchers formulate strategies and introduce techniques to improve decision-making proficiency in organisational situations, and suggest areas for future research.

Materials

The variables of interest were chosen as they have been identified as contributory factors to decision-making processes, in organisational situations. Much research has been conducted into the effect of leadership on followers', with a view to improving performance. However, maladaptive leadership behaviour, may result in unintended and negative consequences. For example, Regling and Watson (2009) and the Commission of Investigation (2011) identified Leadership as a factor which contributed to the Irish banking crisis. Leadership was also identified, by the Columbia Accident Investigation Board (2003), as a contributory factor in the Challenger and Columbia shuttle disasters, which resulted in the loss of fourteen astronauts. Consequently, *Leadership Style* was examined as part of the current study. The Blake and Mouton Managerial Grid Leadership Self-Assessment Questionnaire (2010) is an 18 item scale, which measures the participant's leadership style across two orientations – People and Task. Participants rate the extent to which statements apply to them, using a 5 point Likert scale. For instance, “*Nothing is more important than building a great team*”, is an example of the People related statements. Whereas, “*The more challenging a task is, the more I enjoy it*” is an example of the Task related statements. The scale was tested for reliability using Cronbach's Alpha (α) and received a score of .82 which is considered a satisfactory indicator of internal consistency. See Appendix 2 for full details.

The survey identifies four leadership styles:

- Team Leader; High relationship & high task scores, they ‘*normally form and lead some of the most productive teams*’.
- Country Club; High relationship & low task scores, they are almost incapable of using punitive powers for fear of jeopardising relationships.

- Authoritarian; Low relationship & high task scores, they are task orientated leaders who are autocratic and hard on their workers.
- Impoverished; Low relationship & low task scores, they use a '*delegate and disappear*' approach to leadership.

The Commission of Investigation (2011) identified Groupthink as a contributory factory to the Irish crisis. Baron (2005), proposed Low Self-Efficacy as an alternative Groupthink pre-condition. The General Self-Efficacy Scale (Schwarzer, R. & Jerusalem, M., 1995) was employed to measure participants' self-efficacy. This is a 10 item survey, in which participants rate the extent to which statements apply to them, using a 4 point Likert scale. For instance, "*I can usually handle whatever comes my way*". A total score is calculated, the higher the score the greater the participant's general self-efficacy and, according to Baron, the greater their ability to resist Groupthink behavior. The scale was tested for reliability using Cronbach's Alpha (α) and received a score of .85 which is considered a satisfactory indicator of internal consistency. See Appendix 3 for full details.

The Melbourne Decision Making Questionnaire (Mann, L., Burnett, P., Radford, M. & Ford, S., 1997) is a 22 item survey which measures participants across four decision-coping patterns: Vigilance, Buck-passing, Procrastination and Hypervigilance. Participants rate the extent to which statements apply to them, using a 3 point Likert scale. For instance, "*I consider how best to carry out a decision*", is an example of the Vigilance statements. "*I prefer to leave decisions to others*", is an example of the Buck-passing statements. "*I delay making decisions until is it too late*", is an example of Procrastination questions. "*I feel like I'm under tremendous time pressure when making decisions*", is an example of the

Hypervigilance statements. Only Vigilance is considered to be an adaptive coping pattern. The other three are considered maladaptive. The scale was tested for reliability using Cronbach's Alpha (α) and received a score of .84 which is considered a satisfactory indicator of internal consistency. See Appendix 5 for full details.

While supervisory regulation relied upon the integrity of the banks' management, the Governor of the Central Bank raised concerns over historical unethical behaviour within Banks and Building Societies (2010, p.45 - 58). Therefore, *Ethics Position* was also examined, with a view to making a recommendation in respect of potential for future research. The Ethical Position Questionnaire (Forsyth, D., 1980) is a 20 item survey, which measures the participant's ethical position across two orientations: Idealism and Relativism. Idealism refers to concern for the consequences of an action, whereas, Relativism refers to moral principles. The original survey used a 9 point Likert scale, however according to Forsyth 'people often trim it back to a true Likert 5-point scale'. In this study, participants rated the extent to which statements apply to them, using a 5 point scale. "*One should never psychologically or physically harm another person*" is an example of the Idealism statements. "*What is ethical varies from one situation and one society to another*" is an example of the Relativism statements. A total score is calculated for each orientation, the higher the score the greater the participant's ethical position. The scale was tested for reliability using Cronbach's Alpha (α) and received a score of .83 which is considered a satisfactory indicator of internal consistency. See Appendix 4 for full details.

At the project's design stage, it was decided to omit the Ethics Position Questionnaire (EPQ) from the main survey and request that participants complete it separately. This arose

from a concern that given the number of items in the main survey and the complexity of some EPQ questions, attrition levels may increase, if participants had to complete a survey which included EPQ. This approach appears justified, as there was no attrition from the main survey (66 participants). Forty participants completed the EPQ.

In addition, a small number of demographic questions, relating to group decision-making experience, gender and age were included. Finally, a number of (non-personal) qualitative questions were included to enable participants to elaborate on their individual experiences of organisational decision-making. See Appendix 6 (a & b) for full details.

Procedure:

An in-class survey was conducted on a convenience sample of DBS part time students. Fifteen responses were obtained to the primary survey (Leadership Style, Ethics and Decision-coping questionnaire). A further three responses were obtained in respect of the Ethical Position Questionnaire, from this source. An on-line survey was also conducted, using Google Surveys. Participants were invited to partake by e-mail, internet links were provided to enable participants to access both surveys. The primary survey contained an introductory cover page titled, '**Group Decision-Making in Organisational Situations**', ref. Appendix 1. The introduction explained the purpose of the study (to explore group decision-making in organisational situations), it also confirmed that participation was voluntary and that as responses were anonymous and confidential it would not be possible to withdraw responses once the survey was submitted. The likely timescale, c 10 minutes based on trials, required to complete the surveys was also confirmed. The researcher's and the supervisor's, contact details were provided. At the end of the survey, a debriefing sheet included contact details for AWARE and Samaritans, and re-confirmed the researcher's and supervisor's contact details. See Appendix 7 for full details.

Results

Descriptive Statistics

Sixty-six people participated in the study, each of whom had prior group decision-making experience (e.g. Management, Committee or Project Team etc.). Thirty-five participants were male and thirty-one female, which is a satisfactory gender split, ref Table 1. Due to the sample size and to protect anonymity, participants were not required to confirm their specific age. Participants did confirm the age-range to which they belonged, ref Table 2.

Table 1

		Frequency	Valid Percent
Valid	Male	35	53.0
	Female	31	47.0
	Total	66	100.0

Table
2

		Frequency	Percent
Valid	21-30 years	2	3.0
	31-40 years	23	34.8
	41-50 years	23	34.8
	51 years +	18	27.3
	Total	66	100.0

Using the scales described under Materials, data was gathered in respect of participants' leadership style (People & Task orientation), self-efficacy and decision-coping patterns. Leadership results indicate that 92.4% of participants are classified as 'Team

Leader', which is considered to be the most effective leadership style. Team Leaders combine high relationship & high task scores, they normally form and lead some of the most productive teams, ref. Table 3. Decision-coping results indicate that 'Vigilance' is the preferred decision-coping pattern for the majority of respondents. In 71.2% of cases, participants' Vigilance score exceeded the combined scores of the three other decision-coping patterns (Buck-passing, Procrastination & Hypervigilance), ref Table 4. Vigilance is the only coping pattern associated with rational decision-making and is associated with low levels of psychological distress, (Mann *et. al.*, 1997, p.2).

Table 3 *Leadership Style - Frequencies*

		Frequency	Percent
Valid	Team Leader	61	92.4
	Country Club	2	3.0
	Authoritarian	2	3.0
	Impoverished	1	1.5
	Total	66	100.0

Table 4 *Decision-coping Pattern - Frequencies*

		Frequency	Percent
Valid	Vigilance	47	71.2
	Others combined ^a	19	28.8
	Total	66	100.0

Others combined^a: Buck-passing, Procrastination & Hypervigilance

Descriptive statistics calculated Mean & Median scores, Standard Deviations and Significance, ref Table 5. A Shapiro-Wilk test ($p > .05$) and a visual inspection of their histograms, normal Q-Q plots and Box-plots shows that Blake Mouton (e.g. People: Male, $p = .082$ & Female, $p = .068$) and General Self-efficacy (Male, $p = .391$ & Female, $p = .377$) were approximately normally distributed for both males and females, so the Null Hypothesis

is rejected. As anticipated, given the specialist experience of the participants, male and female results for Self-efficacy are similar, Mean score 32.17 (Male) & 32.47 (Female), Median score 32.00 (Male) & 33.00 (Female) and Standard Deviation 3.90 (Male) & 4.22 (Female), ref. Table 5. However, results for the Melbourne Decision-coping questionnaire (MDQ) are not normally distributed (e.g. MDQ Vigilance, Male, $p = .004$ & Female, $p = .001$), so we fail to reject the Null Hypothesis, for that scale. Figure 1 illustrates the distribution of the MDQ Vigilance responses. Consequently, non-parametric tests will be conducted, including the Kruskal Wallis one-way analysis of variance and the Mann Whitney Z test to compare Medians.

Table 5 *Descriptive Statistics by Sex*

		Mean	Median	Std. Deviation	Sig.
Blake Mouton People	Male	6.43	6.40	.93	.082
	Female	6.58	6.50	1.09	.068
Blake Mouton Task	Male	6.47	6.60	1.03	.212
	Female	6.80	7.00	.90	.124
Self-efficacy	Male	32.17	32.00	3.90	.391
	Female	32.47	33.00	4.22	.377
MDQ Vigilance	Male	9.60	10.00	2.13	.004
	Female	9.80	10.00	2.19	.001
MDQ Buck-passing	Male	1.74	1.00	1.89	<.001
	Female	2.47	1.50	2.34	.003
MDQ Procrastination	Male	1.49	1.00	1.90	<.001
	Female	1.53	1.00	1.85	<.001
MDQ Hypervigilance	Male	1.80	1.00	2.26	<.001
	Female	3.07	3.00	2.48	.013

The survey concluded with a number of questions about the participants' experience of group decision-making. In respect of Directive Leadership, just 48.5% indicated that group members are encouraged to challenge directive leadership. Furthermore, 21.2% indicated that they were not expected to engage in Critical Thinking, before making decisions.

Participants also expressed concerns about the ability of groups to make effective decisions, with only 31.8% indicating that groups can generally be trusted to make better decisions, than individuals. Additionally, 22.7% confirmed that groups often fail to make the best decision. Finally, only 30.3% had received training from their employer about factors which influence group decision-making. These responses provide a compelling argument for the introduction of continuous professional training for organisational decision-makers and leaders, by Social Scientists.

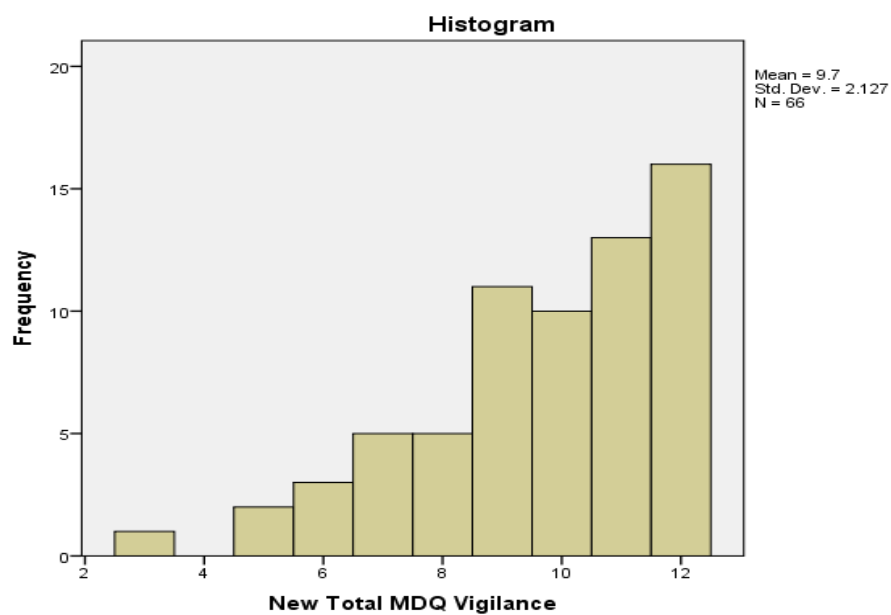


Figure 1: MDQ Vigilance scores - Distribution

Ethics Position Questionnaire / Future Research

As discussed, while integrity is often assumed to be defining character trait amongst leaders, all too often they engage in unethical behaviour with terrible social, financial and psychological consequences. This project engaged in exploratory investigation of ethics position, with a view to recommending future research, to consider whether ‘ethics position’ influences group decision-making. Forty participants, that had previously completed the main survey, subsequently completed the Ethics Position Questionnaire, a 20 item scale, measuring ethical position across two orientations: Idealism-Pragmatism and Relativism. Participants rated the extent to which statements apply to them, using a 5 point Likert, ref Table 6. The maximum score for either orientation is 50.

Descriptive Statistics - Ethics Position Questionnaire

Table 6

	N	Mean	Median	Std. Deviation	Skewness	Sig. ^a	Range	N > Median
Idealism-Pragmatism	40	40.23	42.5	6.99	-1.220	.002	30	30
Relativism	40	29.05	27.5	8.28	.232	.232	28	16

^a Shapiro-Wilk

Thirty participants (75%) scored higher than the Median, for Idealism-Pragmatism, on questions relating to the consequences of their actions. Sixteen participants (40%) scored higher than the Median, for Relativism, on questions relating to matters of moral principle, significantly lower than on Idealism-Pragmatism. These results indicate that the participants rate themselves highly on ethical measures. Future research should consider the influence of Ethics Position upon Decision-coping Patterns with a view to developing techniques and strategies for improving organizational decision-making quality.

Inferential Statistics

Normality

Shapiro Wilk tests revealed that while data for the Blake Mouton leadership (People and Task orientation) and General Self-Efficacy scales were approximately normally distributed, Melbourne Decision-coping Patterns data was not normally distributed, ref Table 5 / Figure 1. Therefore, a series of parametric tests were conducted in respect of the normally distributed data. Non-parametric tests were conducted upon the data which was not normally distributed.

Kruskal Wallis

As the Melbourne Decision-coping Patterns data is not normally distributed, non-parametric tests are required. Therefore, a series of Kruskal Wallis tests assessed whether significant differences exist between the mean ranks of the groups Leadership category (*Team Leader, Country Club, Authoritarian & Impoverished*) and Melbourne Decision-coping Patterns (*Vigilance, Buck-passing, Procrastination & Hypervigilance*). Regrettably, should a significant difference, between the groups' mean ranks, be identified, Kruskal Wallis will not identify the location of the greatest difference. Furthermore, as Kruskal Wallis is a non-parametric test, Post-Hoc tests are not conducted.

A Kruskal-Wallis analysis of variance showed that scores for the four Blake Mouton leadership categories (Team Leader, Country Club, Authoritarian & Impoverished) and scores for three of the Melbourne Decision-coping Patterns (Vigilance, Procrastination and Hypervigilance) did not differ significantly, ref Table 7. However, a Kruskal-Wallis one-way

ANOVA did show that the Blake Mouton Team Leadership categories differ significantly from the ‘Buck-passing’ Melbourne Decision-coping pattern ($\chi^2(3) = 8.101$, $p = .044$), ref Table 8. Buck-passing is a decision-coping pattern associated with individuals with dependent personalities, who “considered fewer outcomes when evaluating alternatives and were less consistent in their preference” (Mann *et. al.* 1997, p.7). The Buck-passing individual avoids making decisions or leaves decisions to others (Mann *et. al.* 1997, p.9).

Table 7 *Leadership Style – Mean Ranks*

	N	Vigilance	Buck-passing	Procrastination	Hypervigilance
Team Leader	61	33.93	31.23	32.61	32.61
Country Club	2	30.50	58.75	38.75	38.75
Authoritarian	2	33.00	45.25	39.75	39.75
Impoverished	1	14.00	63.50	64.50	65.50
Total	66				

Table 8 *Differences between Leadership Style & Decision-coping Patterns*

MDQ ^a	Vigilance			Buck-passing			Procrastination			Hypervigilance		
	χ^2	df	Sig.	χ^2	df	Sig.	χ^2	df	Sig.	χ^2	df	Sig.
BM ^b	1.14	3	.765	8.10	3	.044	3.42	3	.33	4.89	3	.18

MDQ^a: Melbourne Decision-coping Pattern

BM^b: Blake Mouton leadership style * 4

Unfortunately, given the skewed numbers within the Leadership style categories, which comprise four unequal groups, meaningful comparisons between the Leadership style and Decision-coping groups is difficult, ref Table 7. Therefore, while these results indicate that there is no significant difference between the groups, it appears more appropriate to deduce that these results are inconclusive, due to the skewed nature of the data.

As just five participants were identified as belonging to the Country Club, Authoritarian & Impoverished Leadership groups, it is proposed that results in respect of Hypothesis 2, 3 & 4 are inconclusive, but warrant further study. A significantly larger sample, which features improved balance amongst the four categories should be sought, to enable meaningful analysis. However, as stated previously, 92.4% of participants are classified as 'Team Leader' (Table 3), the most effective leadership style, and 71.2% operate with the 'Vigilance' decision-coping pattern, which is the adaptive decision-making process (Table 4). Therefore, while acknowledging the weaknesses outlined above, it is proposed that those results do support the main Hypothesis, '*that the best leaders employ the best decision-making strategy*'. The rationale being that the data was collected from within the same 'specialist' sample of decision-makers. Participant numbers are skewed in favour of Team Leader and Vigilance scores. Furthermore, a one-way ANOVA found that, while not statistically significant, Team Leaders did have the highest self-efficacy (Table 10). Consequently, it is argued that in accordance with Hypothesis 1, *People & Task* orientation and *Self-Efficacy* do predict the *Vigilance* adaptive Pattern for Coping with Decisional Conflict.

Independent Samples t-test

An Independent Samples t-test compared the means between Male and Female respondents to examine whether, or not, significant differences existed in respect of their Leadership scores (People / Task) or General Self-efficacy, ref Table 9. With regard to Leadership style, Females (Mean = 6.6, SD = 1.07) were found to have marginally higher People orientated leadership scores, than Males (Mean = 6.42, SD = .93). The 95% confidence limit shows that the population mean difference of the variables lies somewhere

between $-.66$ and $.32$. An independent samples t-test found that there was not a statistically significant difference between People orientated leadership scores for males and females ($t(64) = .693$, $p = .491$). Therefore the null can be rejected. Additionally, Females (Mean = 6.77 , $SD = .90$) were also found to have slightly higher Task orientated leadership scores, than Males (Mean = 6.47 , $SD = 1.03$). The 95% confidence limit shows that the population mean difference of the variables lies somewhere between $-.78$ and $.17$. An independent samples t-test found that there was not a statistically significant difference between Task orientated leadership scores for males and females ($t(64) = -1.27$, $p = .21$). Therefore the null can also be rejected for these variables.

Females (Mean = 32.48 $SD = 4.15$) were found to have marginally higher General Self-efficacy scores, than Males (Mean = 32.17 , $SD = 3.90$). The 95% confidence limit shows that the population mean difference of the variables lies somewhere between -2.29 and 1.67 . An independent samples t-test found that there was not a statistically significant difference between General Self-efficacy scores for males and females ($t(64) = -.32$, $p = .75$), ref Table 6. Therefore the null can be rejected. However, Mean scores in this sample, indicate that participants have high self-efficacy which, according to Baron (2005, p. 34) is an important defence against Groupthink antecedent conditions, (Table 9).

Table 9 *Sex : People & Task leadership style and General Self-efficacy*

					95% Confidence Intervals				
		N	Mean	SD	Lower	Upper	t	df	Sig.
People	Male	35	6.43	.934	.665	.322	-.69	64	.491
	Female	31	6.60	1.074					
Task	Male	35	6.47	1.031	-.784	.173		64	.173
	Female	31	6.77	.901					
Self-efficacy	Male	35	32.17	3.899	-2.294	1.669		64	.167
	Female	31	32.48	4.154					

One-way ANOVA

A one-way ANOVA examined mean score differences between general self-efficacy between the 4 * leadership styles (Team Leader, Country Club, Authoritarian & Impoverished). When we consider the mean self-efficacy scores for each group, it can be seen that the Team Leader group had the highest self-efficacy score, ref Table 10. However, a one-way analysis of variance showed that there was not a significant difference between the four groups in terms of self-efficacy scores ($F(3, 62) = 1.54, p = .214$), ref Table 11. The skewed nature of the groups is further illustrated at Figure 2, below.

Table 10 *Descriptives - Self-efficacy and Leadership Style*

	N	Mean	SD
Team Leader	61	32.61	3.853
Country Club	2	30.00	1.414
Authoritarian	2	28.00	8.485
Impoverished	1	28.00	--
Total	66	32.32	3.993

Table 11 **ANOVA**
Self-efficacy and Leadership Style

	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	71.76	3	23.92	1.54	.214
Within Groups	964.56	62	15.56		
Total	1036.32	65			

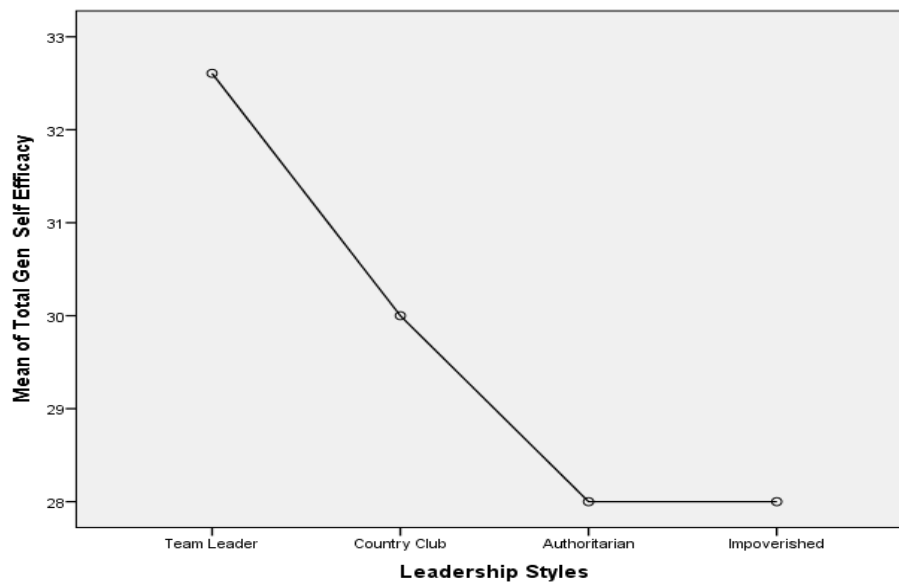


Figure 2: Leadership Styles – General Self-Efficacy

Mann Whitney Z

As the number of participants exceeded 42, a series of Mann Whitney Z tests compared differences between the Medians of the variable Sex and the 4 * Melbourne Decision-coping Patterns. Results for Vigilance, Buck-passing and Procrastination showed that decision-coping patterns for Males and Females did not differ significantly, ref Table 12. However, a Mann Whitney Z test revealed that the Hypervigilance Decision-coping strategy for Males (mean rank = 28.07) and Females (mean rank = 39.63) did differ significantly ($z = -2.488, p = .013$). This suggests that among this sample, Females were more susceptible than

Males to adopting the maladaptive Hypervigilance pattern which is associated with severe emotional distress, impulsive decision-making and panic (Mann *et. al.*, 1997, p.2).

Table 12 *Differences between the Sexes for Decision-coping Patterns*

MDQ ^a	Sex	N	Mean Rank	z	Sig.
Vigilance	Male	35	32.54		
	Female	31	34.58		
	Total	66		-.437	.662
Buck-passing	Male	35	30.61		
	Female	30	35.78		
	Total	65		-1.129	.259
Procrastination	Male	35	32.71		
	Female	31	34.39		
	Total	66		-.371	.710
Hypervigilance	Male	35	28.07		
	Female	31	39.63		
	Total	66		-2.488	.013

Melbourne Decision-coping Questionnaire^a : Vigilance, Buck-passing, Procrastination & Hypervigilant

Discussion

This study argues that people's decision-making, is highly exposed to social influence. Research by social psychologists, including Asch, Festinger & Carlsmith, Milgram, Janis, Myers & Lamm and Darley & Latane proves that people are prone to irrational decision-making, this is particularly evident when operating in stressful situations. Normative social influence and informational social influence persuades individuals to conform to group behaviour (Passer *et. al.*, 2009, p. 624). Based upon findings of government reports, this study examined Leadership & Self-efficacy and their influence upon Decision-making, in the context of the Irish Banking crisis.

Leadership is “the ability to guide a group toward the achievement of goals”. (Riggio, 2009, p.342). Psychology provides many leadership theories, including Universalist and Behavioural Theories of Leadership, discussed previously. ‘Behavioural’ theories allow measurement of leadership characteristics, to identify an individual's preferred leadership style (Baron *et. al.* p. 449 - 451). Other leadership theories refer to Charismatic, Transformational and Transactional leadership, which employ differing approaches to enhance employee performance (Riggio, 2009, p.361). Whilst much research has focussed on the effects of leadership style upon followers (e.g. Hamstra *et. al.*, 2014 and Hannah *et. al.*, 2016), recent studies have examined the beneficial effects upon the leaders themselves (Lanaj *et. al.*, 2016).

Groupthink was identified as a significant contributory factor in the banking crisis. Baron proposes a more commonplace Groupthink model, than Janis originally envisioned, in which Low Self-efficacy is a pre-condition (2005, p.12). Low Self-Efficacy occurs where

Group-members lack confidence in their ability to reach satisfactory resolution and fear serious consequences when challenging group norms (2005, p. 32 – 35). In view of its' role as a Groupthink pre-condition and given its' influence upon effort expended & performance enhancement (Bandura & Cervone, 1983), on harmonious passion for work (Johri & Misra, 2014) and strain resistance (Lucke and Furtner, 2015), this study considered self-efficacy in respect of leadership and decision-making.

Riggio describes four decision-making styles: 'Autocratic' decisions are made solely by the leader. 'Consultative' decision-making occurs where the leader seeks group-members' input, but retains the final say. 'Democratic' decision-making occurs where all group members express opinions and the decision is made by majority-vote. 'Consensus' decision-making requires all group members' agreement, (2009, P. 329 – 330). As discussed, group decision-making is heavily influenced by many factors, including Group Norms (Postmes *et. al.*, 2001, p. 918), System 1 and System 2 processes (Kahneman, 2003, p.697), 'Fuzzy-trace' processes (Reyna & Lloyd, 2006, p.193) and 'Gut-instinct' (Michels *et. al.*, 2011, 752).

While Groups are believed to behave more conservatively and considered less likely to make irrational decisions, than individuals (Passer *et. al.*, 2009, p. 629), recent high-profile examples illustrate irrational, unethical, dangerous and illegal decisions, taken by groups of qualified, experienced and motivated individuals acting on behalf of organisations. There is no known research into psychological factors which contributed to the Irish banking crisis, to date research has predominantly focussed on technical, rather than human factors. This study is relevant as it complements existing research, fills a gap in the literature, and suggests areas

for future research. Furthermore, it is proposed that organisational leaders should receive continuous professional development, delivered by Social Scientists, in respect of the psychological factors which are proven to influence group decision-making within organisations.

Furthermore, this project investigated whether, or not, precedent proves that flawed decision-making processes may re-emerge within a relatively short time-scale, despite in-depth investigation, personnel replacement and strategic re-structuring. The NASA space-shuttle disasters analogy demonstrates that Production Pressures may cause routine and material deviation from Policies and Procedures. This creates a psychological state in which deviance is normalised over time, increasing risk-tolerance, which in turn results in “an incremental descent into poor judgement” (Vaughan, CAIB public hearings, testimony, para. 14). The CAIB report describes Groupthink behaviours, which contributed to the shuttle disasters, (2003, P. 197 – 202). Similar pressures, to deviate from traditional banking principles preceded the bank crisis. Nyberg illustrates similar Groupthink behaviours, which contributed to the bank crisis. (2011, p. i, 7, 8, 9, 48). An empirical study investigated the variables Leadership Style, General Self-efficacy and Decision-coping Patterns, to discover whether, or not, significant relationships or differences exist.

Future research should endeavour to produce a significantly larger sample, with improved balance amongst the four leadership categories, to enable meaningful analysis. Finally, as an absence of leadership integrity was identified as having contributed to the banking crisis, future research should also consider the influence of Ethics Position upon Decision-coping Patterns. A pilot study of Ethics Position demonstrated that 75% of

participants scored higher than the Median to questions relating to the consequences of their actions and 40% scored higher than the Median, to questions relating to matters of moral principle.

As 92.4% of participants are classified as 'Team Leader', which is the most effective leadership style, and 71.2% operate with the adaptive 'Vigilance' decision-coping pattern, it is proposed that those results do support the main Hypothesis: *'That the best leaders employ the best decision-making strategy'*. i.e. that *People & Task* orientation and *Self-Efficacy* do predict the *Vigilance* adaptive Pattern for Coping with Decisional Conflict. While a series of Kruskal Wallis tests indicate that there is no significant difference between the Leadership style and Decision-coping groups, unfortunately, given the skewed numbers within the Leadership style categories it appears more appropriate to deduce that these results are inconclusive, in respect of Hypotheses 2, 3 & 4.

Significantly, less than 49% of participants believe that decision-makers are encouraged to challenge directive leadership, where weaknesses or risks are identified. Furthermore, over 21% indicated that decision-makers are not expected to engage in critical thinking, or evaluate risks & benefits, before coming to a decision. Also, less than 32% indicated that groups can generally be trusted to make better decisions, than individuals. Finally, despite occupying the role of decision-maker, only 30% had received training from their employer, to optimise group decision-making skills.

The limitations previously discussed, including skewed data and some inconclusive results, are acknowledged. While the sample number is lower than planned, it was considered sufficient for the purposes of the study, given the participants' prior group decision-making experience and leadership expertise. The sample was also well balanced in respect of gender split and age-ranges. Feedback received from participants indicates that responses were obtained from a variety of nationalities, industries and countries, with participants employed in a range of leadership roles, from team-leaders to executives. So, it is argued that the strengths outlined above significantly outweigh the weaknesses and justify completing the study.

In view of the financial, economic and social cost, stemming from the irrational decisions which preceded the banking crisis, it is evident that organisations must commit themselves to improving their decision-making processes, to ensure that the mistakes of the past are never repeated.

Conclusion

Group decision-making is a critical organisational process (Riggio, 2009 p. 328), however, groups of experienced, qualified and motivated leaders frequently produce flawed, irrational or even dangerous decisions. This is particularly evident when group members are operating in stressful situations. As discussed previously, decision-making processes are heavily influenced, for better or worse, by factors including Social Influence, Leadership style & Self-efficacy. Tests showed that there were no significant differences between the sexes in respect of Leadership style, Self-efficacy or Vigilance, Buck-passing & Procrastination Decision-coping patterns. However, females were found to have significantly higher scores, than Males, for the ‘maladaptive’ Hypervigilance Decision-coping pattern. While results in respect of Hypotheses 2, 3 & 4 were inconclusive, findings demonstrate that the best leaders do employ the best decision-making strategy, which supports Hypothesis 1. The study also provides alarming evidence that decision-makers are not encouraged to challenge leaders, or engage in critical thinking, before making decisions. Participants also expressed concerns about the ability of groups to make effective decisions, with almost one quarter of respondents indicating that groups often fail to make the best decisions. Finally, less than one third of respondents have received training from their employer, in respect of factors which influence group decision-making. Furthermore, recent history provides an important precedent which demonstrates that flawed decision-making processes may re-emerge, despite previous in-depth investigation, personnel replacement and strategic re-organisation, resulting in “*an incremental descent into poor judgement*” (Vaughan, CAIB public hearings, testimony, para. 14).

Overall, this study highlights the complex nature of group decision-making, in organisational situations and formulates a compelling argument for the introduction of continuous professional development of organisational decision-makers, managers and other leaders, by Social Scientists in respect of the psychological factors which influence individual and group decision-making. In conclusion, it should be remembered that, in referring to unethical, illegal or morally repugnant behaviour, Milgram concluded that “*often it is not so much the kind of person a man is, as the kind of situation in which he finds himself that determines how he will act*” (Milgram, ed. 2013, p. 208).

Ends

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Appendices

Appendix 1

My name is Richard Buggy, I am an undergraduate student, conducting research that explores group decision-making in organisational situations. This research is being conducted as part of a B.A. (Hons) in Psychology and will be submitted for examination.

If you have experience of group decision-making, on behalf of an organisation (e.g. Management, Committee or Project Team etc.), you are invited to participate in the research. Participation involves completing and returning the attached anonymous survey, which may take 10 – 15 minutes of your time.

While the survey asks some questions that may cause some minor negative feelings, it has been used widely in research. If any of the questions do raise difficult feelings for you, contact information for support services are included on the final page.

Participation is completely voluntary, so you are not obliged to participate.

As participation is **anonymous** and **confidential**, responses cannot be attributed to any one participant. Unfortunately, for this reason, it will not be possible to withdraw your data from the study after the questionnaire has been collected.

The questionnaires will be securely stored and data from the questionnaires will be transferred from the paper record to electronic format and stored on a password protected computer.

It is important that you understand that by completing and submitting the questionnaire that you are consenting to participate in the study.

Should you require any further information about the research, please contact me at xxxx@xxxxx . My supervisor may be contacted at xxxx@xxxx

Thank you for taking the time to complete this survey!

Appendix 2

The Blake and Mouton Managerial Grid Leadership Self-Assessment Questionnaire

Below is a list of statements about leadership behavior. Read each one carefully, then, using the following scale, decide the extent to which it actually applies to you.

For best results, answer as truthfully as possible.

never sometimes always 0 1 2 3 4 5

1. _____ I encourage my team to participate when it comes decision-making time and I try to implement their ideas and suggestions.
2. _____ Nothing is more important than accomplishing a goal or task.
3. _____ I closely monitor the schedule to ensure a task or project will be completed in time.
4. _____ I enjoy coaching people on new tasks and procedures.
5. _____ The more challenging a task is, the more I enjoy it.
6. _____ I encourage my employees to be creative about their job.
7. _____ When seeing a complex task through to completion, I ensure that every detail is accounted for.
8. _____ I find it easy to carry out several complicated tasks at the same time.
9. _____ I enjoy reading articles, books, and journals about training, leadership, and psychology; and then putting what I have read into action.
10. _____ When correcting mistakes, I do not worry about jeopardizing relationships.
11. _____ I manage my time very efficiently.
12. _____ I enjoy explaining the intricacies and details of a complex task or project to my employees.
13. _____ Breaking large projects into small manageable tasks is second nature to me.
14. _____ Nothing is more important than building a great team.
15. _____ I enjoy analyzing problems.
16. _____ I honor other people's boundaries.
17. _____ Counseling my employees to improve their performance or behavior is second nature to me.

18. _____ I enjoy reading articles, books, and trade journals about my profession; and then implementing the new procedures I have learned.

Scoring Section After completing the Questionnaire, transfer your answers to the spaces below:

People Question

1. _____ 4. _____ 6. _____ 9. _____ 10. _____ 12. _____ 14. _____ 16. _____
17. _____

TOTAL _____ X 0.2 = _____ (Multiply the Total by 0.2 to get your final score)

Task Question

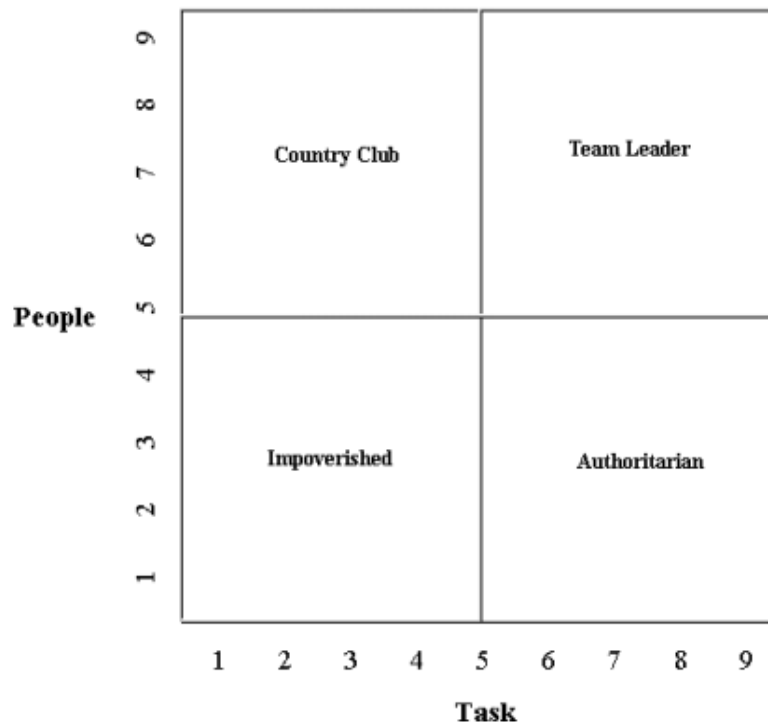
2. _____ 3. _____ 5. _____ 7. _____ 8. _____ 11. _____ 13. _____ 15. _____
18. _____

TOTAL _____ X 0.2 _____ (Multiply the Total by 0.2 to get your final score)

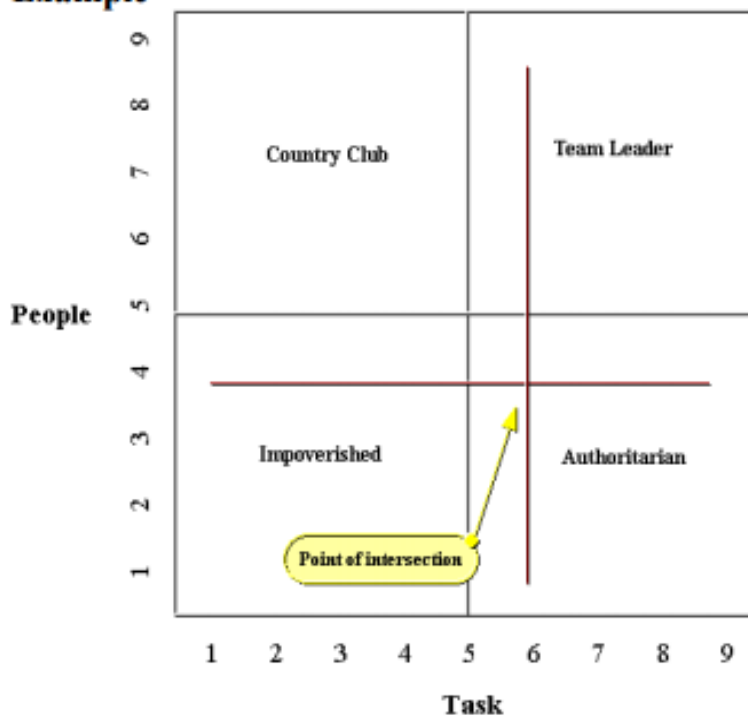
Matrix Section Plot your final scores on the graph below by drawing a horizontal line from the approximate people score (vertical axis) to the right of the matrix, and drawing a vertical line from the approximate task score on the horizontal axis to the top of the matrix.

Then, draw two lines from each dot until they intersect.

The area of intersection is the leadership dimension that you operate out of.



Example



The above sample shows score of 4 in the **people** section and a score of 6 in the **task** section. The quad where the two lines intersect is the leadership style, in this case -- **Authoritarian** section.

The Results

This chart will give you an idea of your leadership style. But, like any other instrument that attempts to profile a person, you have to take in other factors, such as, how your peers and employees rate you as a leader, do you get your job done, do you take care of your employees, are you helping to "grow" your organization, etc. You should review the statements in the survey and reflect on the low scores by asking yourself, "If I scored higher in that area, would I be a more effective leader?" And if the answer is yes, then it should become a personal action item.

Authoritarian Leader (high task, low relationship) People who get this rating are very much task oriented and are hard on their workers (autocratic). There is little or no allowance for cooperation or collaboration. Heavily task oriented people display these characteristics: they are very strong on schedules; they expect people to do what they are told without question or debate; when something goes wrong they tend to focus on who is to blame rather than concentrate on exactly what is wrong and how to prevent it; they are intolerant of what they see as dissent (it may just be someone's creativity), so it is difficult for their subordinates to contribute or develop.

Team Leader (high task, high relationship) This type of person leads by positive example and endeavors to foster a team environment in which all team members can reach their highest potential, both as team members and as people. They encourage the team to reach team goals as effectively as possible, while also working tirelessly to strengthen the bonds among the various members. They normally form and lead some of the most productive teams.

Country Club Leader (low task, high relationship) This person uses predominantly reward power to maintain discipline and to encourage the team to accomplish its goals. Conversely, they are almost incapable of employing the more punitive coercive and legitimate powers. This inability results from fear that using such powers could jeopardize relationships with the other team members.

Impoverished Leader (low task, low relationship) A leader who uses a "delegate and disappear" management style. Since they are not committed to either task accomplishment or maintenance; they essentially allow their team to do whatever it wishes and prefer to detach themselves from the team process by allowing the team to suffer from a series of power struggles.

The most desirable place for a leader to be along the two axis at most times would be a 9 on task and a 9 on people -- the Team Leader. However, do not entirely dismiss the other three. Certain situations might call for one of the other three to be used at times. For example, by playing the Impoverished Leader, you allow your team to gain self-reliance. Be an Authoritarian Leader to instill a sense of discipline in an unmotivated worker. By carefully studying the situation and the forces affecting it, you will know at what points along the axis you need to be in order to achieve the desired result.

Ends

Appendix 3

The General Self-efficacy Scale

Please read the sentences below and select an answer for each statement which indicates how much the statement applies to you.

1 = **Not at all true** 2 = **Hardly true** 3 = **Moderately true** 4 = **Exactly true**

1	I can always manage to solve difficult problems if I try hard enough.	
2	If someone opposes me, I can find the means and ways to get what I want.	
3	It is easy for me to stick to my aims and accomplish my goals.	
4	I am confident that I could deal efficiently with unexpected events.	
5	Thanks to my resourcefulness, I know how to handle unforeseen situations.	
6	I can solve most problems if I invest the necessary effort.	
7	I can remain calm when facing difficulties because I can rely on my coping abilities.	
8	When I am confronted with a problem, I can usually find several solutions.	
9	If I am in trouble, I can usually think of a solution.	
10	I can usually handle whatever comes my way.	

Scoring: Add the scores together from all 10 items. The higher the total the greater the person's generalized sense of self-efficacy.

Appendix 4

The Ethics Position Questionnaire

Please indicate if you agree or disagree with the following items. Each represents a commonly held opinion and there are no right or wrong answers.

I am interested in your reaction to such matters of opinion. Rate your reaction to each statement by indicating the extent to which you agree, where:

Completely disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Completely agree	
1	2	3	4	5	Score
					[]
1. People should make certain that their actions never intentionally harm another even to a small degree.					
					[]
2. Risks to another should never be tolerated, irrespective of how small the risks might be.					
					[]
3. The existence of potential harm to others is always wrong, irrespective of the benefits to be gained.					
					[]
4. One should never psychologically or physically harm another person.					
					[]
5. One should not perform an action which might in any way threaten the dignity and welfare of another individual.					
					[]
6. If an action could harm an innocent other, then it should not be done.					
					[]
7. Deciding whether or not to perform an act by balancing the positive consequences of the act against the negative consequences of the act is immoral.					
					[]
8. The dignity and welfare of the people should be the most important concern in any society.					
					[]
9. It is never necessary to sacrifice the welfare of others.					
					[]
10. Moral behaviors are actions that closely match ideals of the most "perfect" action.					
					[]
11. There are no ethical principles that are so important that they should be a part of any code of ethics.					
					[]
12. What is ethical varies from one situation and society to another.					
					[]

13. Moral standards should be seen as being individualistic; what one person considers to be moral may be judged to be immoral by another person. []
14. Different types of morality cannot be compared as to “rightness.” []
15. Questions of what is ethical for everyone can never be resolved since what is moral or immoral is up to the individual. []
16. Moral standards are simply personal rules that indicate how a person should behave, and are not to be applied in making judgments of others. []
17. Ethical considerations in interpersonal relations are so complex that individuals should be allowed to formulate their own individual codes. []
18. Rigidly codifying an ethical position that prevents certain types of actions could stand in the way of better human relations and adjustment. []
19. No rule concerning lying can be formulated; whether a lie is permissible or not permissible totally depends upon the situation. []
20. Whether a lie is judged to be moral or immoral depends upon the circumstances surrounding the action. []

Ends

Appendix 5

MELBOURNE DECISION MAKING QUESTIONNAIRES I + II

© L.MANN, P.BURNETT, M.RADFORD, S.FORD, 1997

Part 1:

Instructions

People differ in how comfortable they feel about making decisions. Please indicate how you feel about making decisions by ticking the response which is most applicable to you.

When making decisions	True for me	Sometimes true	Not true for me
(1) I feel confident about my ability to make decisions	[]	[]	[]
(2) I feel inferior to most people in making decisions	[]	[]	[]
(3) I think that I am a good decision maker	[]	[]	[]
(4) I feel so discouraged that I give up trying to make decisions	[]	[]	[]
(5) The decisions I make turn out well	[]	[]	[]
(6) It is easy for other people to convince me that their decision rather than mine is the correct one	[]	[]	[]

Decision Self Esteem: Max 12, Min 0

Instructions:

People differ in the way they go about making decisions. Please indicate how you make decisions by ticking for each question the response which best fits your usual style.

When making decisions	True for me	Sometimes true	Not true for me
1. I feel as if I'm under tremendous time pressure when making decisions	[]	[]	[]
2. I like to consider all of the alternatives	[]	[]	[]
3. I prefer to leave decisions to others	[]	[]	[]
4. I try to find out the disadvantages of all alternatives	[]	[]	[]
5. I waste a lot of time on trivial matters before getting to the final decision	[]	[]	[]
6. I consider how best to carry out the decision	[]	[]	[]
7. Even after I have made a decision I delay acting upon it	[]	[]	[]
8. When making decisions I like to collect lots of information	[]	[]	[]
9. I avoid making decisions	[]	[]	[]
10. When I have to make a decision I wait a long time before starting to think about it	[]	[]	[]
11. I do not like to take responsibility for making decisions	[]	[]	[]
12. I try to be clear about my objectives before choosing	[]	[]	[]
13. The possibility that small things might go wrong causes me to swing abruptly in my preferences	[]	[]	[]
14. If a decision can be made by me or another person I let the other person make it	[]	[]	[]
15. Whenever I face a difficult decision I feel pessimistic about finding a good solution	[]	[]	[]
16. I take a lot of care before choosing	[]	[]	[]

17. I do not make decisions unless I really have to	[]	[]	[]
18. I delay making decisions until it is too late	[]	[]	[]
19. I prefer that people who are better informed decide for me	[]	[]	[]
20. After a decision is made I spend a lot of time convincing myself it was correct	[]	[]	[]
21. I put off making decisions	[]	[]	[]
22. I cannot think straight if I have to make decisions in a hurry	[]	[]	[]

Vigilance scale	items 2, 4,6,8,12,16	(mean 9.41, sd 2.22, alpha 0.80)
Buck-passing scale	items 3,9,11,14,17,19	(mean 4.85, sd 2.93, alpha 0.87)
Procrastination scale	items 5,7,10,18,21	(mean 3.88, sd 2.39, alpha 0.81)
Hypervigilance scale	items 1,13,15,20,22	(mean 4.61, sd 2.26, alpha 0.74)

Reference: Leon Mann, Paul .Burnett, Mark Radford and Steve Ford. **The Melbourne Decision Making Questionnaire:** An instrument for measuring patterns for coping with decisional conflict. *Journal of Behavioural Decision Making*. 1997, 10, 1-19.

Appendix 6(a)

Please read the following statement and then indicate in the space provided whether, or not, it applies to you.

I have experience of making decisions as part of a group (e.g. Management, Committee or Project Team etc.), on behalf of an organisation. **Yes** [] **No** []

If you have no experience of making decisions as part of a group, on behalf of an organisation, there is no need to continue with the survey. Thank you for your participation.

Demographic Questions:

	Gender		Female	[]	Male	[]
Age	21-30 years	[]				
	31-40 years	[]				
	41-50 years	[]				
	51+ years	[]				

Appendix 6(b)

Below is a list of statements about group decision-making.

Please read each statement carefully and consider them from the perspective of your own experience of group decision-making (e.g. Management, Committee or Project Team etc.). Then, using the following scale, indicate the extent to which it applies to your experience.

For best results, answer as truthfully as possible.

	Disagree	Neither Agree / Disagree	Agree	
	0	1	2	Score
1	Where the group leader favours a particular course of action, group members are encouraged to highlight weaknesses / risks.			[]
2	Group members are expected to think critically and evaluate risks & benefits, before making decisions.			[]
3	Groups can generally be trusted to make better decisions than individuals.			[]
4	Groups often fail to make the best decision.			[]
5	My organisation does provide education about factors which influence group decision-making.			[]
6	I have undertaken education, about factors which influence group decision-making, independent of my employer.			[]

Briefly outline the factor which you consider to be most important when a group is making significant decisions (more than one factor may be recorded) :

For example:

*That the group leader expresses a preference for a particular course of action, or
That an individual should avoid dissenting from the group, to avoid deadlock.*

Appendix 7

Thank you for taking the time to complete this survey.

If you have experienced any negative feelings associated with the survey, or this subject matter, you may wish to speak confidentially with someone about it.

For example, **AWARE** may be contacted by phone at 1890 303 302 (10.00 a.m. – 10.00 p.m., Monday – Sunday). Further information and contact details are located at <http://www.aware.ie/contact/>

In the Republic of Ireland, **Samaritans** may be contacted by phone at 116123 (24 hours a day, 365 days a year). Further information and contact details are located at <http://www.samaritans.org/how-we-can-help-you/contact-us>

If you have any further queries about this research project, my e-mail address is xxxxx.xxxx@xxxx

My supervisor may be contacted at xxxx@xxxx

Ends