Effect of Brain Dominance on Decision Making

What is the effect of brain dominance on decision making? Changes in brain dominance affect risk preference, which is a fundamental component of our thought process. Attitudes toward risk provide criteria for decision making. A test of brain dominance shows the degree to which typical behavior of an individual reflects use of left or right modes of thinking. The causal relationship from brain dominance to decision making is illustrated by risk preference of the decision maker's rationale. Given a decision to work as an employee for $25K or bid on a contracting job worth $40K, people's rationale from risk averse to risk seeking varies with their brain dominance (i.e., left to right).

Risk Averse (Left=10 Right = 0).
Risk driven. Employee is chosen 100% because there is no risk. The decision-making process is not difficult because the criteria is simple. Driven by risk of a bad outcome, the decision maker compares 25K to nothing. The question they ask is "Do I want to lose 25K?" Ultra conservative decision making is rooted in the decision maker's risk aversion.
Employee - No risk of experiencing the outcome of no income.
Employee - Because the P is unknown and there is a risk of loss of my job. (I'm risk averse!)

Avoid Loss (Left=9 Right = 1).
Employee is chosen 100% to avoid loss.
Employee - known. Stable. Avoid risk. Contractor makes $40K – expenses.
Employee - probability of some money is best.

Need Security (Left = 8 Right = 2).
Employee is seen as secure and chosen almost 100%. Numerical analysis is used to make a decision. Preference is for stability of employment and a guaranteed payoff. Only one decision maker did not choose employee based on almost 17 years experience as a contractor.
Employee - I will go with the guarantee. If P=.5 L-squared sub E= 1x 25,000=25,000 and L-squared sub C= .5x 40,000=20,000. Need a 62% probability of win but you have to consider other contracting possibility.
Employee - No probability of contractor win. No cost of operation to contractor. My ability to obtain a job is secure…I will wait for another opportunity.
Employee - I need to perceive that the probability is greater than 62.5% of winning. I'll be an employee. (I face this in my career, and have accepted being an employee as opposed to contracting.)
Employee - Take the money and run since I am a single parent and need to baseline income. But realistically, I would need to evaluate the value of P. What is the investment.
Employee - I'd have a guaranteed payoff for the work done.
Employee - In order to come out ahead, the probability of winning would have to be > 62.5%. I prefer the stability of employment.
Contractor - I've been a contractor for almost 17 years. I've risked many, many proposals. I like variety, so changing assignments is a good thing.

Need Information (Left = 7 Right = 3).
Employee is chosen 100% because there is too much unknown. What is known is valued as safe and secure.
Employee - being risk averse, I am not willing to accept the uncertainty of winning a contract proposal.
Employee - I always have $25,000 income (safer).
Employee - don't like risk (personal value). More long term stability as employee. More benefits as employee. Security has greater value than higher salary.
Employee - long term security. Risk of loosing too great as contractor.
Employee - because stability in employment and additional benefits are important to me. Assumptions: employment is stable, employee has other benefits such as medical, 401K, stock options.
Employee - the known. Stability. Something better than nothing.
Employee - steady income to feed family - but can continue to look for contract options - where "win" is a high probability.

Employee - I would choose employee if I did not know the value of P. However, in a real world example, I would make an estimate of P and then make the decision.
Employee - Mainly because there is not enough information, in my opinion, to decide otherwise. I might be willing to take a risk for the $40,000 but I don't know the risk. Is it 10% or 90% likely?
Employee - In this case, you need to look at opportunity costs. Do you have other contracts in work? If none, probably accept employee.
Employee - decision - to be employee. Know nothing about what is required for the task. Too much risk to go for $15,000 more. Employee route is safe because money is guaranteed.

Need Certainty (Left = 6 Right = 4).
Employee is seen as a guarantee and chosen 80%.
Employee - Choose employee because guarantee of income.
Employee - It is a guaranteed foundation from which to base future opportunities.
Employee - Insufficient data, but with data available, "employee" is better choice.
Employee - I need the money because I am the primary breadwinner. I can't invest my time if there is the potential of no return, especially if an acceptable return is guaranteed.
Employee - I would choose the employee because of my family situation. I need to know I have income to meet family financial needs.
Employee - Would choose employee because I wouldn't hazard the gamble of no salary. More comfortable with the certainty.
Employee - I would be the employee. This would give me more time to assess the future.
Employee - Risk is unknown. P could be .9. If P were 0.1 would choose contractor.
Employee - to avoid the uncertainty of what P could be.
Employee - stability for supporting family, don't know enough info about risk, probability to be contractor.
Employee - certainty of getting <u>some</u> money. If P was small (maybe < = 0.2?), I might choose contractor.
Employee - Take EE oportunity. Bid on contractor: if win, drop EE. If can't drop EE, network like crazy as an EE, prove expertise, to increase chances of getting higher-paid contractor job next time.
Employee - know that I would receive a guaranteed fixed amount with little risk.
Employee - like the certainty of $ and benefits.
Employee - steady base to make other life decisions.
Employee - stability.
Contractor - As a contractor I will be able to manage the losses. The success will depend on my work. As employee I will depend on someone decisions.
Contractor - more profitable if I get the bid. And if I did not get the bid I find out why and apply that towards the next one.
Contractor - Faith in own abilities -> low P (perceived).
Contractor - I choose to be winning contractor. Why - Freedom: choice of contracts. Chance to define process. Can change later. Opportunity to win more. No risk: if lose - game starts over.

Difficult Decision (Left = 5 Right = 5).
Over 27% cannot make a decision. Employee drops to 33%. A decision is more difficult when opposing thought processes are used. Similar to people arguing opposing perspectives, the individual has an internal debate. There is a mental struggle between needing information and not having it, between wanting certainty and having to make assumptions. Complexity increases as more variables and possibilities are considered. From one point of view it makes sense, but from another it does not. The right brain says “Go!” and the left says “I don’t know what we’re doing here.”
Employee - Security over income. In my experience, once you have the job it is harder to get rid of an employee than a contractor, so "employment" is continued. Worth the less $$.
Employee - benefits @ 30% -> contracting only 20% more lucrative. Stability/safety net for family and other obligations.
Employee - wife and 2 kids - all of whom like to eat. No info on other contract pending. No probability of success indicated.
Employee - unit of time is not defined for the 40K. it could be the entire contract e.g., starts on a one year contract at which time it would be no bid. This seems to be more steady.

Employee - rather the certainty of a position even though salary may be lower - benefits may outweigh that of consultant. With contractor - uncertain as to lifetime of project -- could be terminated. Even if 40,000 salary still have to pay as deductions to those already provided as an employee.
Employee - Based on absence of information about probability I would choose the employee path. With no information I consider the gamble 50/50 (at best) which offers an expected return of only $20,000.
No Decision - Not enough information to make an informed decision. Too many unknown facts.
No Decision - Cannot make decision - do not recall decision making "process".
No Decision - The decision would depend on much more information than provided. Too many assumptions to make to generalize.
No Decision - Depending on job - if have capabilities then choose employee (automatic $25K) else choose contractor (can oversee, but not necessary to be tech competent) - could get 40K but not out anything otherwise.
No Decision - Not enough data to analyze properly OR assume I can bid at little cost for other jobs which are available, i.e. Take Risk.
Contractor - Scale #'s by 3: Employee $75K, Contractor $120K. Assume win/lose is 50/50 to start. Employee is stuck at $75K. First contract or two may be 50/50. But odds will improve with experience…P is function of (t), # of proposals, etc. Better opportunity for contractor. Employee always faces risk of job loss... Contractor has more control of risk of job loss.
Contractor - I have confidence in my capabilities - my assumptions are: minimal investment up front, 5 or fewer competitors, the effort hits my area of expertise – a core competency. P.S. This approach has worked for me on more than one occasion.
Contractor - Possibility of return is greater. Chi non risica. Other opportunities likely available. Quality of proposal.
Contractor - assume 1 year salary. Will not work 1 year for 25K. Low risk if I don't get this. There are plenty of other jobs.
Contractor - I would bid to win. Accept the challenge. I would prepare in advance. I understand the stakes. I can make the sale.
Contractor - more flexibility in my time, hence I can maintain/find other supplement employment in addition to 40K. Presentations/oral and written communication is a strength so increase probability of winning bid. I can do the job successfully.
Contractor - work in various industries, projects, etc. can move around more freely.

Feel Certain (Left = 4 Right = 6).
Fifteen percent cannot make a decision, 35% select contractor.
Employee - long term employment benefits, etc. stability for the future.
Employee - want/need the guaranteed income averse to that much risk.
Employee - due to the fact my husband is unemployed, I am the primary support for my family, I cannot accept the risk of not having any income.
Employee - 25K (guaranteed position) family, conservative (few years left to work), mortgage to pay, car loan, 401K, comfortable in company HQ environment.
Employee - Personal goals - Long term. Only specific timeframe? Job stability - long term. Financial security only at this time.
Employee -for job security. With a family (if I had one) and with my hobbies and activities outside of work I would want to know I could always pay for them and support myself.
Employee - too risk averse for latter is my current decision! Don't feel I have enough financial backup for the gamble. Don't feel I have enough emotional backup for the gamble.
Employee - I have more control of that situation.
Employee - Bird in the hand. Can continue to look while being paid.
Employee - Employee with benefits plus $25K would need more info in order to go to contractor i.e., some feel for competition, some probability of winning.
No Decision - Not enough information to make decision.
No Decision - Unable to make a decision based upon lack of information. Too many unknowns…labor market, competition, cost to bid. Too many other factors that are part of the decision are not represented.
No Decision - Need to know P before making the decision. Must know the probability of winning the contract. I would choose contractor if P>= 50%.

Contractor - I would become a contractor and work on minimize P. P<0.4-> Contractor would have the expected better outcome.
Contractor - I would choose the contractor position. I have done my research and feel certain that I would obtain the contract. If I don't win the contract, I have other options.
Contractor - It's the potential customer's loss, not mine, if I'm not selected. I bring value wherever I go.
Contractor - because I have a 50-50 chance of getting the 40K and I will have more direct input into the opportunity of obtaining the contract. Versus no risks associated with the employee slot of less money and opportunity.
Contractor - because if I win I get more and if I lose I will have more opportunities to get a good contract.
Contractor - Without knowledge of P, I should maximize my benefit - If I failed, I could just go submit another proposal next week somewhere else.
Contractor - extra money, the time frame although uncertain is the same for both, the effort is also the same.

Feel Confident (Left = 3 Right = 7).
Everyone makes a decision. Confidence is on the rise, over 56% select contractor.
Employee - because you are guaranteed 25,000 zero risk.
Employee - Better take something that is definite rather than the total unknown.
Employee - risk of not being able to provide for family unacceptable to me with current circumstances.
Employee - Safe alternative, no risk, lower gain is acceptable, more long term. I dislike change.
Employee - more responsibility, more stability (employment wise).
Employee - Do not know probability of winning. Know loss 25,000. Know opportunity 15,000.
Employee - I would choose the employee position, which ensures me of $25,000. The main reason is that I just lost my job and I need immediate (and definitive) income to pay the bills and feed my family. If I already had a job I would choose the contractor position, because of my nature.
Contractor - I would bid for the job for 40K based on the fact that I believe that I could do the job & express my abilities to win the job.
Contractor - because I can choose to try for other or additional contracts even if lose a few; also can hire help! (So why am I an employee?)
Contractor - assuming relative short term, try again somewhere else. Employee can be uncertain as well. Employee 25K per year? Unacceptable.
Contractor - almost 2 to 1 odds that you will succeed. Betting on willingness to spend more up front to save more long term by company.
Contractor - why because there is at least 50% possibility to win 40K and I am willing to take the risk.
Contractor - If lose, try for others. Can afford some time off to average same as employee. Have someone to support me if without a job.
Contractor - good market for Contractors. If I don't succeed, there will be other opportunities. I can make a good proposal. I've never been a Contractor - new experience.
Contractor - I am confident that I would win the bid. The risk of losing is small because of my confidence. I would also have the opportunity to try again.
Contractor - able to make decisions. Belief in getting job. Want to take a chance.

Make Assumptions (Left = 2 Right = 8).
Fifty percent choose contractor. *Reasonable assumptions are made*.
Employee - Stability. Do not want to move. Cannot take risk at this stage in life.
Employee - Aversion to risk. Prefer sure thing given the unknown P. with known P might chose differently.
Employee - less risk (probability of a loss) for total potential maximum loss of $15,000 - Benefit package.
Employee - lower risk to be employed. Problem contractor cost is too high if lose.
Employee - given the lack of information it is a safer choice.
Employee - In my situation, out of a job and with a family, I would go the employee route to gain the additional benefits of medical, 401K, etc., which brings the net worth well over 25K. Then, once I became an employee, I would go after some of the contractor jobs.
Contractor - Confidence in being able to get job. Willing to take risk. I know the job better than anyone else. For incompletely specified situation, I can make reasonable assumptions.
Contractor - More opportunities will come along if unsuccessful. If win, more $. If not, can learn & reapply.

Contractor - Higher payoff if win. There is always another contract around the corner if lose. You already know you are going to be fired (at end of contract). Takes the pressure off. Provides a reason to seek new adventures. Short fuse on success determination.
Contractor - Verify the approval of contract prior to leaving the company. Second choice: employee ensures you will make something.
Contractor - want to work at home and have other sources of income.
Contractor - confidence in ability to do job. Greater reward. Greater control over outcome of work. Greater influence over winning.

Have Faith (Left = 1 Right = 9).
Over fifty-seven percent choose contractor. Opportunity exists. Faith is a factor.
Employee - Out of work, P is unknown, salary only, employee only guaranteed. Other assumptions: need income, cost of winning and benefits about $15K. Effective contractor salary is only $25K. Become employee. No benefit to taking the risk.
Employee - Take 25,000. Why. I guess I need security no matter what the lower wage.
Employee - the uncertainty involved with contractor is not worth it!
Employee - close to retirement cash out of pension would be less in the long run if money remain in federal plan. Economy is uncertain to self manage. More secure more responsibility and control more variety.
Employee - Because the bulk of the difference would be consumed in benefits, additional taxes (social security), investment to win and investment for my future work.
No decision - Insufficient data to make decision. (Would recommend this test as a gambling type scenario. Too many internal/external constraints to consider…unless consequence was part of your test).
Contractor - $25,000 is not enough money.
Contractor - the Contractor choice with the known risk for the following reasons: excellent job market to acquire another employee position. Savings to tie me over in case I loose. If I win I will likely get paid more than an employee.
Contractor - opportunity exists to affect "P". Opportunity exists to make multiple proposals.
Contractor - Why: 40,000 divided by 0 = .50 Take the risk.
Contractor - because you could increase your probability of winning on factors you can control (presentation, expertise, etc.) With employee, it is fixed and unchangeable, then is no opportunity to change that outcome.
Contractor - If you believe in what you do, you know that even if it doesn't work out (the bid) this time, it will in the future and the outcome is greater.
Contractor - more opportunity. If you lose this once - there are more opportunities in the future. An employee is more stuck: the contractor has larger gains if you can soak up and manage the risk.
Contractor - Because I have faith in myself and my abilities. I know I will win this contract, if given the opportunity, and if not I'm willing to accept the possibility of continued unemployment.

Risk Seeking (Left = 0 Right = 10).
Opportunity driven. Need to assess uncertainty. Fun is a factor. The decision-making process is not difficult because the criteria is simple. Driven by opportunity of a good outcome, the decision maker compares 40K to 25K. The question they ask is “How can I get the extra 15K?”
Employee - Without assessment of competition or chance for contract would choose employee.
Employee - provides safety net to: 1) explore new avenues 2) take risks within company 3) increase education 4) freedom to make decisions 5) do what you love, love what you do (not need to get a job).
Employee - Too many unknowns to pick contractor. Employee is a sure thing and could still continue to look for a better opportunity while working with better or known odds.
Employee - If consider just me, $40K Contractor: higher payoff, more fun, assume short term, low investment, assume there are other contracts opportunities. If consider dependents, $25K Employee: assume long term, high investment, only if assume this is the only contract available.
Contractor - My time is more valuable than to be an employee. The world is full of opportunities.