

## Antecedents of Representative Bias and Choice Decision: A Case of Major Cities of Pakistan

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*The main theme behind this study was to identify the factors that generate the representative bias phenomenon among individuals as because of this phenomenon people usually make irrational buying decisions. Representative bias, sometimes referred to as the representativeness heuristic, is when we base our conclusions or judgments on how individuals or circumstances conform to a specific prototype or stereotype. Representative bias causes individual to categorize a situation on the basis of a pattern of earlier practices or opinions regarding the situation. It can be valuable when trying to make a rapid decision but it can also be restraining as it leads to close-mindedness for instance in stereotypes. For this study, semi-structured discussions with the professional people of major cities of Pakistan who are habitual in terms of shopping, and then reconfirm the answers by matching with existing literature and apply NVivo on their brief results to get a word-cloud for presuming the sure antecedents of representative bias, and check the context and content validity of the established scale by approving the scale subsequently the authorization of 5 language and 5 market experts. A self-developed semi-structured scale was used for data collection. The main population for this study was the professional people of major cities of Punjab who are habitual in terms of shopping. The conclusion of the study demonstrates that “choice of alternatives, environmental fluctuations, & own perception” are the variables that strongly generates the representative bias phenomenon in any individual.*



## 1. Introduction

A Representative Heuristic is a cognitive inclination in which an individual orders a circumstance focused around an example of past encounters or convictions about the situation. For a successful decision, the use of decision tree and the alternative ways too for the evaluation of certain subject is a good approach (Stewart et al., 2013; Durbach & Stewart, 2020). It could be helpful when attempting to settle on speedy choice. The representativeness heuristic is also utilized when making judgments about the likelihood of occasion under instability (Parveen et al., 2020). There are a few sorts of representative heuristics, including; the Gambler's Fallacy, Base Rate Fallacy, Regression to the Mean, and Conjunction Fallacy. Most of the entrepreneurs play with the mind of people regarding decision making choice towards a specific thing (Arvidsson et al., 2020). They usually offer a lot of sizes and colors in a single product in order to attract customers. Most of the efficient entrepreneurs use the strategy of product proliferation for the success of the business (Spasova & Isen, 2013; Tuu et al., 2021).

In psychology, heuristics are straightforward, creative procedures which persons regularly practice to structure findings and decisions (Keren & Breugelmans, 2020). They are psychological substitute ways that normally comprise directed on one portion of a complex matter and overlooking others. These tenets work well beneath most situations, yet they can swift systematic abnormalities from logics, possibility or sound pronouncement theory (Levine, 2022). These pressure and complex issues are the part of decision-making environment, that most of the time effect the long-term planning of the manager (Boulding et al., 1994; Sulasih & Adawiyah, 2021). The coming about slips is called "cognitive predispositions" and numerous diverse kinds have been documented (Stern, 2024). These have been demonstrated to effect persons' verdicts in conditions like admiring a house or picking the outcome of a legal case (Lynch et al., 2022). Heuristics normally oversee planned, ordinary decisions however can additionally be operated as purposeful psychological processes when working from inhibited data (Gigerenzer et al., 2022).

Cognitive researcher Herbert A. Simon firstly suggested that human decisions are focused around heuristics, captivating the indication from the ground of processing (Korhonen & Wallenius, 2020). In the early 1970s, analysts Amos Tversky and Daniel Kahneman revealed three heuristics that motivate a wide variability of normal decisions (Takemura, 2021). People make different sort of investment decisions from different perspectives in so many diverse situations (Gilbride & Allenby, 2004; Wamhoff & Baumgartner, 2024). The sum buyers are eager to pay for a lottery ticket is not the same as the sum they will pay to safeguard against an equivalent misfortune. These discoveries set in movement the Heuristics and Biases inspection program, which contemplates in what way persons make true decisions and the situations beneath which those decisions are untrustworthy. This exploration verified the believed that persons are levelheaded acting performers, however given a hypothesis of data preparing to simplify how persons decide on assessments or verdicts. This examination has guided practically all present hypotheses of choice making.



In spite of the fact that a lot of examination has concentrated on how heuristics lead to lapses, they could be seen as objective in an underlying sense. Majority of the management decisions are concerned about the uncertain environment and these decisions are mostly lies between the extreme corners of rationality and irrationality (Moore, 1977; Huck et al., 2020). As per this opinion, heuristics are satisfactory for most determinations deprived of being unreasonably entreating on the cerebrum's assets. An alternate hypothetical viewpoint sees heuristics as completely sane in that they are fast, could be made without full data and might be as correct as more convoluted systems. By understanding the portion of heuristics in human brain science, promoters and diverse persuaders can influence choices, e.g., the costs persons pay for products or the amount they purchase.

Sometime during a day, we over and again need to settle on judgments and choices. Such choices and judgments could be about your association with your companions, what to consume for supper, which school to request or which city you ought to settle down in. Albert (2007) and Albert and Thomson (2024) concluded that these choices and judgments are just based on the level of probability of possible outcomes. According to the propensity theory, the term likelihood or propensity is a "primitive indistinct term described by a set of adages and afterward joined with perception in a way more roundabout than a definition as far as recurrence". However, how would we go about settling on these choices? Examine on judgment is worried about how people make utilization of different prompts when they close about circumstances and occasions.

According to McShane, Nirenburg, & Jarrell (2013) and Wykowska et al. (2020), there are so many things that can be the causes for biased behavior, like; over-dependence on one's personal experience as heuristic proof; misinterpretations of detail; abuse of instinct over investigation; acting from feeling; the impacts of exhaustion; considering excessively few choices or options; the figment that the leader has more control over how occasions will unfold than he or she really does; overestimation of the significance of data that is effortlessly possible over data that is not promptly accessible; and not perceiving the interconnectedness of different choices.

At the point when settling on choices or judgments, we frequently utilize mental alternate ways or "general guidelines" known as heuristics. For each choice, we don't generally have sufficient energy or assets to look at all the data before we settle on a decision, so we utilize heuristics to help us achieve choices rapidly and effectively. Once in a while these mental alternate ways might be useful, yet in different cases they can prompt mistakes or cognitive predispositions. Sometime, people really make wrong decisions because of their biased approaches which lead to the systematic errors on the way to the success of any decision, and removing these sorts of errors is the main motive behind any descriptive research (Johnson & Schkade, 1989; Montibeller & von Winterfeldt, 2024).

The representativeness heuristic is one sort of heuristic that we utilize when making judgments. In this specific illustration, we appraise the probability of an occasion by contrasting it with a current model that as of now exists in our personalities. Our model is the thing that we think



is the most pertinent or ordinary case of a specific occasion or item. Heuristics are portrayed as "judgmental alternate ways that for the most part get us where we have to go – and rapidly – however at the expense of at times sending us off kilter." Heuristics are valuable on the grounds that they utilize exertion decrease and improvement in choice making.

## 2. Literature Review

Investment is an art, not a science. There are no settled standards, distinctive economic situation you'll utilize diverse methodologies, however regardless of how you contribute, you must have some fundamental standards. At the time of decision making, rational people/managers usually focus on all of the available alternatives and choose the most appropriate one in order to achieve high level of success probability (Buckley, Devinney, & Louviere, 2007). The primary contrast in the middle of standards is that controls elude to some subtle element principal and specialized examination, for example, fiscal proportions and specialized pointers. In any case, standards of venture allude to the greater picture of speculation, it directs you what you are going to do with your speculation "overall". Case in point, must broaden your portfolio, should not contribute with obtained cash, etc. Verstraeten & Van den Poel (2005) conclude that many people collect a lot of variables/alternatives at the time of decision making to make an efficient portfolio but these alternatives cannot be helpful because of their characteristics as a non-random variable. Such selection of alternatives is basically known to be as sample bias.

The gambler's fallacy, the confidence in runs of great and bad fortunes could be clarified by the representativeness heuristic.

Individuals have a tendency to judge the likelihood of an occasion by discovering a 'similar known' occasion and accepting that the probabilities will be comparative. Ordinarily, a decision maker picks one option among a little overall characterized set, and taste homogeneity is accepted among a generally characterized population (Ben-Akiva, McFadden, Abe, Böckenholt, Bolduc, Gopinath, & Steinberg, 1997). As a piece of making importance from what we encounter, we have to order things. In the event that something does not fit precisely into a known classification, we will inexact with the closest class accessible. Generally, the essential deception is in accepting that closeness in one perspective prompts comparability in different perspectives. In general, the probability of success will increase when there is familiarities exist among decisions and environmental conditions (Elbanna & Child, 2007).

The speculator's deception, the faith in runs of great and bad fortunes might be clarified by the representativeness heuristic. Hayibor & Wasieleski (2009) concluded that the utilization of the accessibility heuristic has vital ramifications for the moral choice making methodology and for the advancement of moral conduct in associations. Individuals will likewise "compel" measurable game plans to speak to their convictions about them, for instance a set of arbitrary numbers will be precisely stirred up so no comparable numbers are close to each other.



The law of little numbers is the presumption individuals make that a little example is illustrative of a much bigger population. Heuristics are mental easy routes that ordinarily lead us to revise results more often than not. Social therapists, be that as it may, are regularly more intrigued by the circumstances prompting a wrong result. Chambers & Hayashi (2012) concluded that most of the individuals select the most appropriate thing from the available alternatives based on their preferences and circumstances. The representativeness heuristic is, no doubt utilized when boosts that are like a model are judged as being more inclined to fit a class than jolts that are not like a model. Distinctive settings force diverse stipulations on leaders, and that chiefs adjust their choice criteria and choice methods to the requirements of the setting (Rosness, 2009).

Inclinations are human propensities that lead us to take after a specific semi consistent way, or structure a certain viewpoint focused around decided ahead of time mental thoughts and convictions. Magi (2009) conclude that the component in activity is focused around the singular's constrained capacities of handling data. At the point when financial gurus follow up on an inclination, they don't investigate the full issue and might be oblivious to proof that negates their starting assessments. Desire infringement are imperative determinants of the measured effect of aims attribution and negative desire infringement can influence the expectations credited to proposers and the propensity to punish them for low offers (Bellemare, Kröger, & van Soest, 2011). Staying away from cognitive inclinations permits financial gurus to arrive at unprejudiced choice built exclusively in light of accessible information.

Some basic mental predispositions tormenting financial specialists include: agent inclination, cognitive discord, home predisposition, disrespect inclination, gift impacts, existing conditions predisposition, law of little numbers, mental bookkeeping, connection predisposition, and changing danger inclination. Most of the rational people make wrong decisions sometime because they think that what they are thinking is exactly correct according to the situation (Silverman, 1994).

Most vital human judgments are made under states of instability. In general, most of the consumers in the market are usually framed toward some specific products based on their efficient presentations and changing environment. McFadden (1986) mentions in his experimental study that sellers generally prepare the mind of consumer based on characteristics of product, comparative market volatility, and the market position of that product. Social analysts, for example, Thomas Gilovich, Daniel Kahneman, and Amos Tversky have examined a few paramount heuristics and ran across mistakes connected with their utilization. One of these heuristics is the representativeness heuristic. In judging things, we contrast them with a model or agent thought and have a tendency to see them as run of the mill or atypical as indicated by how they match up with our model. Best case scenario, representativeness is an inclination focused around a false or sketchy generalization that decides a hefty portion of an individual's choices. Generally, most of the people in the market are price conscious and they usually use reference prices at the time of making their purchase decisions. Putler (1992) concluded that deviations



between the genuine cost and the reference cost pass on utility all by themselves and that misfortune repugnance causes the observed uneven conduct.

In this study, self-developed semi-structured questionnaire has been used. For this study, numerous features were taken from several studies toward particular variables. About other's opinion (McFadden, 1986) environmental fluctuations/complexities (Slight direction from - Adamowicz, et al., 2005; Didier & Lowenkron, 2009; Elbanna & Child, 2007 – strong directions from interviews), own perception (Slight direction from - Lambert, Bessière, & N'Goala, 2012; Reckless, Bolstad, Nakstad, Andreassen, & Jensen, 2013; Silverman, 1994 - strong directions from interviews), choice from alternatives (Buckley, Devinney, & Louviere, 2007; Krämer & Wiewiorra, 2012; Swami, 2013), income level (Ainslie & Rossi, 1998; Putler, 1992), and about representative bias (Barron & Ursino, 2013; Gudmundsson & Lechner, 2013; Militana, Wolfson, & Cleaveland, 2010; Hayibor & Wasieleski, 2009).

As, many people in the world are price conscious based on their circumstances, so they are usually very much sensitive towards a little price change. According to Ainslie & Rossi (1998), a low-salary family unit with an extensive family may be exceptionally value touchy and react to little relative value changes in numerous diverse item classes.

### **3. Methodology**

Sociologist has conveyed imaginative ways to the business world and additionally the educated community. Three sorts of research techniques are utilized to be specific, logical exploration, exploratory examination, and clear research. Every one of the things incorporated into the procedure of request are called populace (Kothari, 2004) while, samples are the agents of the populace. The number of inhabitants in this study is the general population of Punjab (Pakistan) who is all that much continual in the shopping and is cognizant as well. This study is basically based on subjective approach to get wide range of diversified data from individuals and used the NVivo to get word cloud from the responses of the individuals in order to get clear picture of unexplored antecedents behind representative bias.

### **4. Results & Discussion**

Most of the individuals classifies the conditions based on their previous practices or sentiments on the subject of the situation and then take decisions based on their own perception. However, the propensity for individuals to point their particular achievements to internal factors whereas hitting the guilt for disappointments on peripheral factors, which shows that it is sometime difficult to change the own perception of the individuals. Moreover, individuals selectively construe what they perceive based on their concern, relatedness, understanding, and attitudes. So, it is sometime not very difficult to Judge somebody based on one's insight of the group to which that individual belongs. Lastly, experts try to judge an individual's own perception based on further variables factors.



Some individuals admitted that their cognitive possessions are partial and they have multiple decisions to make every day, so, it is very difficult to rely only on heuristics for the reason that they let them to preserve psychological resources and still make decisions rapidly and proficiently. So, most of the time, environmental fluctuations may alter their way of thing towards buying anything in the market. Making decisions on the basis of representativeness includes linking an object or state to the plans, or psychological examples, that they get from the changing environment. However, when they make decisions on the basis of representativeness, they may lean to make further mistakes by misjudging the environmental fluctuations.

**Figure No 1: Results of NVivo based on the Responses of Individuals**



## 5. Conclusion

The study is an exploratory examination in which connections among the autonomous variables; Others Opinion, Choice from Alternatives, Income Level, and dependent variable which is representative bias are found based on the existing literature. Whereas, the connection among autonomous variables; Environmental Fluctuations/Complexities and Own Perception are found based on the semi-structured interviews. Most of the people try to choose a product/entity on the basis of their risk levels (Rosness, 2009). But it's a general phenomenon that people usually consider their past experience while purchasing or using the same entity.

### 5.1 Recommendations & Future Ideas

That examination seemed, by all accounts, to be fundamentally restricted to have the ability to just five proposed variables (other's opinion, choice of alternatives, environmental fluctuations, income level, own perception) in spite of the way that there is a lot of some distinctive variables that can likewise impact the representative behavior of the people. We just found the particular



connection of these proposed variables (other's opinion, choice of alternatives, environmental fluctuations, income level, own perception) that influence the representative behavior of the general population. Though, there are considerable measures of different variables that can likewise be the reason for one-sided choice making toward purchasing patterns.

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