Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

Following Spinoza: Knowledge as an Active State of Mind and a Motivator of Learning—An Empirically-Grounded Philosophical Study

Abraham Mounitz[1]

Abstract

Following Spinoza's Ethics, the study seeks to provide an empirical corroboration for the hypothesis that the positive sensation associated with the acquisition of knowledge alongside the self-awareness of this sensation is the motivator for the acquisition of further knowledge. To this end, the study will present a theoretical grounding in the Ethics as the premise underpinning its subsequent empirical discussion. The empirical part is based on a three-year examination of students taking a logic course at Zefat Academic College. The statistical analysis of this examination confirms the theoretical premises established by Spinoza more than 350 years ago.

Keywords: *knowledge, mental state, motivation, reflective capacity.*

Introduction

The concept of knowledge in Spinoza's *Ethics* accords with contemporary research in the sense that both state that knowledge is a mental state, albeit one which also possesses a physiological aspect[i]. Spinoza states that a human is single psychophysical unit with two parallel aspects of thought and spread (mind and matter). Each action or occurrence reflects some kind of cognitive and mental method alongside parallel physiological sensations.[ii] In the *Ethics*, Spinoza focuses on the mental aspect, and leaves the discussion of the physical aspect to biology and biomedicine. For example in Part 2, Proposition 7, Spinoza states that that "...The order and connection of ideas is the same as the order and connection of things..." [tr. Edwin Curley]. Spinoza later states that "...He who has a true idea at the same time knows that he has a true idea, and cannot doubt the truth of the thing...." [Part 2, Proposition 43; tr. Curley]. The very knowledge acquired by observation thus already incorporates reflection as a critical act that confirms the knowledge as true. Spinoza's premise is therefore that knowledge is inherently a mental (as well as physical) state [see Part 2, Propositions 41 and 42, as well as *Tractatus de Intellectus Emendatione*, section 38; tr. Curley].

This statement, and the reflective link it implies, follows from the Proof to Part 4, Proposition 52, where Spinoza links the reflective capacity acquired along with the self-esteem of attaining knowledge as a motivation for the continued acquisition of knowledge. In this respect, he states that "…Next, while a man considers himself, he perceives nothing clearly and distinctly, or adequately, except those things which follow from his power of acting, i.e. which follow from his power of understanding…." [tr. Curley]. As the Proposition itself states: "…Self-esteem can arise from reason, and only that self-esteem which does arise from reason is the greatest there can be…." [tr. Curley]. The Demonstration to this Proposition also states "…Therefore, self-esteem arises from reason…." [tr. Curley].

In this respect, Kristin Primus (2021) explains the link between knowledge, reflection, and adequate content. Specifically, she perceives two aspects to reflection: the first is the understanding that knowledge (the idea) is so clear and distinct that it does not require examination. The second aspect is that—like Descartes' reflection on doubt—any reflection must be examined critically. In both aspects, however, the acquisition of clear and distinct knowledge goes hand-in-hand with the capacity to self-reflect on the knowledge thus acquired.[iii]

Spinoza's epistemic approach challenges the premise suggesting that motivation leads to knowledge and states that the acquisition of knowledge gives rise to motivation for the acquisition of further knowledge and so on. According to Spinoza, "knowledge" in and of itself evokes positive sensations in us by virtue of

[1] Zefat Academic College, Lecturer in Philosophy and Head of Philosophy Department of the multidisciplinary field; Member of the Supreme Academic Committee

Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

being a motive force expressing inner determination—mental determination and conscious awareness—as opposed to the passive state that preceded it. It therefore follows that if knowledge is a mental state, then the same applies to the lack of knowledge. With that said, however, the lack of knowledge is a passive mental state that does not include a motivation for the acquisition of further knowledge, and as such it lacks self-awareness and is referred to as the "privation of knowledge" [Part 2, Proposition 35, tr. Curley] (people who do not know, do not know that they do not know). As Spinoza states elsewhere, "...He who has a true idea at the same time knows that he has a true idea, and cannot doubt the truth of the thing...." [Part 2, Proposition 43, tr. Curley], since this is knowledge that accords with reality.

As Ursula Renz (2021) explains,

"…Spinoza considers doing epistemology as valuable for our moral standing consists in the assumption that epistemic certainty makes a difference to the states or experiential qualities making up our mental lives…." [p. 146].[iv]

In this respect, Gilead (1986) considers reflection as a necessary condition for distinguishing between imagination and the workings of the intellect, and associates intellectual reflection with the inherent characteristics of true knowledge.[v]

The Identicality of Will and Intellect

"…Voluntas & intellectus unum & idem funt ratio…." [Part 2, Proposition 49, Corollary]

The roots of the link between knowledge and motivation arise from the identification of will and intellect in Spinoza's philosophy. In Part 2, Proposition 49, Corollary, Spinoza states that "...The will and the intellect are one and the same...." [tr. Curley]. The affirmation or negation of a thing are supposed to be determined by the intellect at the same time as we determine (understand intellectually) that thing as positive or beneficial and consequently desire it (willfully). Spinoza presents an example pertaining to the affirmation or negation of the idea of a triangle as knowledge that mandates us to conceive of it as a shape which in any case or state contains three angles that equate to two right angles. It therefore follows that knowledge contains certainty and that error or the privation of knowledge do not contain certainty.

In his explanations to this proposition, Spinoza also offers an extensive reasoned argument which rejects five erroneous assumption separating ideas from volition [see id. – Part 2, Proposition 49].

Will and intellect refer to the concept of an "idea," and both express the capacity to affirm or to negate. In this respect, we are not only concerned with the mental capacity to affirm a thing as true or false, but also with the mental capacity to express a passion or a drive to a thing the mind is attracted to and which it desires alongside the thought (the idea) which preceded it, which is good and desired. It therefore follows that will = intellect and vice versa [see Part 2, Proposition 49, Scholium]. It is this basic premise that forms the foundation of the association between knowledge and motivation[vi].

Spinoza stresses that human beings tend to confuse images, words, and ideas, and are not careful about assessing these as true or false. By so doing, they miss true scholastic knowledge, which, in turn, leads to unreasoned conduct [see Part 2, Proposition 49, Corollary and Part 2, Proposition 49, Scholium]. An idea is no mere mute image on a slate (as it were), but rather a concept that incorporates either affirmation or negation [loc. cit.]. In other words, we are concerned with a clear mental state which necessarily incorporates knowledge alongside an experiential sensation that either affirms or negates.

In Part 2, Definition 3, Spinoza states that "…By idea I understand a concept of the Mind that the Mind forms because it is a thinking thing…." [tr. Curley]. In a later Scholium, Spinoza determines that we are not concerned with a sensory thing, but rather with a concept that is the result of a mentally-aware action. In other words, the human mind, insofar as it is a thinking thing (a consciousness), is a kind of "printing press" which coins ideas. Put differently, we are concerned with an active "device," which constantly impresses concepts upon human awareness.

Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

Spinoza expresses the passivity of lacking knowledge in Part 2, Proposition 35, Proof, where he states that error arises from a lack of awareness, or from a confused awareness which does not accord with reality. In this respect, Spinoza presents an example involving the sun, as we conceive of it as near or far according to the extent of influence it exerts on our bodies. This is not because we do not know its true distance from us, but as a result of a sensory judgement of heat and cold, and light and shadow rather than any reasonable or knowledgeable judgement [see Part 2, Proposition 35, Scholium].

Discussion

In Part 3, Proposition 1, Spinoza states that when the mind is active when it coins a true idea, that is to say it understood and acquired knowledge according with reality, and it is passive in a state of the privation of knowledge.

In Part 3, Proposition 3, Spinoza establishes a connection between a true idea acquired from an understanding of a thing and active conduct, as opposed to the privation of knowledge, or knowledge not according with reality that expresses passiveness.

In Part 3, Proposition 53, Spinoza states that "…[W]hen the Mind considers itself and its power of acting, it rejoices, and does so the more, the more distinctly it imagines itself and its power of acting…." [tr. Curley].

The link between the activeness of the knowledge acquirers and the activeness of their mind—which is also manifested in their reflective capacity to observe themselves and empower their capacity for action (knowledge), which necessarily gives them joy—thus speaks for itself.[vii]

Spinoza describes the act of reflection as a byproduct of this activeness as follows: "…A man does not know himself except through affections of his Body and their ideas. So when it happens that the Mind can consider itself, it is thereby supposed to pass to a greater perfection, i.e. to be affected with joy, and with greater joy the more distinctly it can imagine its power of acting…." [Part 3, Proposition 53, Proof; (tr. Curley)]. This state of a perfection greater than that which preceded it is people's joy or self-esteem, and as such increases the motivation to empower the self-capacity which arises from knowledge and from the aspiration toward self-existence (the *connatus*) [see Part 3, Proposition 54, Proof]. This capacity to transition from a lesser perfection (passivity) to a greater perfection (activity) is the very essence of the human mind. This is, in fact, the definition of human motivation as mental activeness, as opposed to the existential urges of other non-sentient animals (in this respect, Spinoza offers an explanation and examples in Part 3, Proposition 57, Proof).

In Part 3, Definition of Affects 25, Spinoza presents the connection between self-esteem and the reflective capacity that follows the actions of the intellect: "…Self-esteem is a Joy born of the fact that a man considers himself and his own power of acting…." [tr. Curley]. This definition allows us to readily identify the motive or the motivation that arises from the reflection for "more": more knowledge, more self-capacity, and more self-esteem, and it is this that leads, in turn, to the equivalence of knowledge = motivation.

In this respect, Gilead (1986) interprets reflection as a virtue of ideas. In his words, "...there is no idea of an idea prior to the presence of a given idea...." He further notes that "...in other words, we are concerned with a cognitive trait which is contextually dependent on an idea. A passive sensation thus ceases to be passive when we form a clear and distinct idea. Knowledge, therefore, gives rise to knowledge, and a higher level of awareness (active awareness) trumps—at least partially—a lower level of awareness (passive awareness).... Knowledge may [thus] trump its emotional virtues by a corrective influence, [which] voids the emotive effect of a lower level of awareness [the privation of knowledge or error]...." [pp. 173-176, tr. from Hebrew by the present author].[viii]

In Part 4, Proposition 1, Proof, Spinoza states that "…Falsity consists only in the privation of knowledge which inadequate ideas involve and they do not have anything positive on account of which they are called false…." [tr. Curley]. We will, once again, remark that in the absence of knowledge, awareness is based on images, guesses, prejudices, vague memories from the past etc. We are thus concerned with the passive

Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

'trailing' of the mind. In this respect, contemporary research states that when it is managed by environmental factors (noises), conscious awareness is impressed by representativity and availability, illustrations of images that are nothing more than heuristics and biases. [ix]In this spirit, Ursula Renz (2021)'s commentary also includes Spinoza's suggestion for the correction of biases:

"…humans have, in principle, the possibility to do a better epistemic job than we usually do when, in our daily lives, we indulge in unguided contemplation. We just have to begin reasoning by conceptualizing reality along the lines of those properties we share with all things…."[x] [p. 168]

In Part 4, Proposition 14, Spinoza notes that knowledge (*cognitio*) itself is an affect (*affectus*)—an activation of the mind.

In Part 4, Proposition 8, Spinoza states that "…The knowledge of good and evil is nothing but an affect of Joy or Sadness, insofar as we are conscious of it…." [tr. Curley]. In the Proof to this proposition, Spinoza makes it clear that the good is what empowers our capacity for action, and the bad is what reduces our capacity for action. It therefore readily follows that knowledge in general is the affective activation of the motivation for affirmation or negation. Later on in the text, Part 4, Proposition 19 states that "…From the laws of his own nature, everyone necessarily wants, or is repelled by, what he judges to be good or evil…." [tr. Curley]. We shall note that this positive desire which follows knowledge which accords with reality arises from the premise that "will and intellect are one and the same," and lead to our conclusion, viz. that motivation arises from knowledge.

The opposite mental state is manifested in Part 4, Proposition 23, whereby action arising from non-suitable ideas (that is, the privation of knowledge) is passive. However, if knowledge is indeed a mental state, then humans are thus passive relative to what they attained. When they understand and act, they are active and advance their mental states with self-esteem.

In this respect, Curley (1973a) notes that

"...[For]... it is one of his distinctive doctrines that every idea involves an element of affirmation or negation. In opposition to Descartes, Spinoza holds that there is no such thing as having an idea without affirming or denying something about the object of the idea. Whatever the merits of this controversy between Descartes and Spinoza may be, its application to the present case is clear...." [p. 34].[xi]

I believe it is possible to bridge between Spinoza's correspondent and coherent approaches with respect to true knowledge. The encounter between these reinforces the claim which states that knowledge gives rise to motivation. After all, what is a mind made of? It is made of clear and true knowledge that at the same time also accords with reality, with these two aspects being two sides of the same coin. The *Ethics'* applied approach thus joins the knowledge of truth with the sensations of the knower and this, in turn, forms an applied encounter between knower and reality.

In Part 4, Proposition 52, Spinoza discusses the concept of self-esteem. According to Spinoza, this concept arises from the intellect, and in Part 4, Proposition 52, Proof, Spinoza posits that this sensation is a mental state which arises from people's "…power of understanding…" [tr. Curley] of their [mental] actions. Here, too, it is easy to distinguish the equivalence established between knowledge and motivation as a mental entity driven by self-esteem.

The fifth part of the *Ethics* discusses the most supreme capacities of the human intellect. While the discussion links the attainments of the intellect and its use in everyday life with the metaphysical discussion presented in the first part of the *Ethics*, the present study will not expand upon the metaphysical aspect of conscious awareness but will rather focus on statements pertaining to the relation between understanding and knowledge as positive sensations and as growth engines for a "more" motivation, as opposed to the privation of knowledge as a joyless passivity lacking any motivation for the pursuit of knowledge.

Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

In Part 5, Proposition 3, Spinoza states that "…An affect which is a passion ceases to be a passion as soon as we form a clear and distinct idea of it…." [tr. Curley]. In the Proof to this proposition, Spinoza stresses that when we exist in a state of the privation of knowledge, or knowledge that does not accord with reality, we are concerned with a passive mental state, and that when we conceive (learn, absorb, understand) a clear and distinct knowledge (*cognitio adequata*) resulting from rational reflection, we transition to an active mental state involving the reflective capacity and the sense of self-esteem discussed above.

In this respect, Curley (1973a) notes that

"...As I understand Spinoza, he believed that this kind of knowledge, knowledge of "intimate nature" of a finite singular thing—which in the Ethics appears to be the only kind of intuitive knowledge—had to wait on our having attained an adequate knowledge of the laws of nature and in particular on our having attained a knowledge of the way in which bur senses work. Such knowledge is presumably necessary in order for us to be able to interpret experience...." [p. 59][xii]

Even the highest level of knowledge towards which Spinoza directs us as the apex of satisfaction thus passes through the knowledge of the laws of nature and the reality which we have discussed in the present work as giving rise to motivation.

In Part 5, Proposition 9, Spinoza argues that an affect is only bad or harmful when it disrupts the mind's capacity to think. In other words, our mental state is more positive the wider our knowledge or the more extensive our information. This is as opposed to a state where our knowledge is based on traumatic memories, archetypes, rumors, beliefs, imagination, prejudice, etc., which bias reality to our mental environment rather than adapting our conscious awareness to the objective knowledge environment. In this respect, we are not only concerned with learning and science, but also with decision making and everyday conduct (in this respect, also see Part 5, Proposition 10, Scholium).

We shall end our theoretical discussion with Part 5, Proposition 38: "…The more the Mind understands things by the second and third [true] kind of knowledge, the less it is acted on [(*patitur*)] by affects which are evil…." [tr. Curley]. In this respect, it is worth noting note 1 on p. 397 of Yirmiyahu Yovel's 2003 translation of the *Ethics* into Hebrew, where he argues that Spinoza employed *patitur* here in the dual sense of both suffering as well as passivity. On the other hand, people who possess knowledge that accords with reality (that is true and correct), is more "perfect" and as such has "more reality", i.e. has more self-permanence (in this respect see Curley's translation of Part 5, Proposition 40, Proof).

In his explanation, Andrea Sangiacomo (2023) focuses on the association between the knowing conscious awareness and a sense of joy and contentment as an accompaniment to metaphysical knowledge in the *Ethics*:

"…For Spinoza, the highest form of knowledge – intuitive knowledge – or Scientia – intuitive – is intrinsically linked to the highest form of joy and contentment. This is not merely a coincidental correlation, but a necessary connection rooted in Spinoza's metaphysics…."[xiii] [p. 178]

Summary of the Theoretical Discussion: Knowledge and Motivation = Intellect and Emotion

There is little doubt that motivation is an emotion, a drive, or a passion. As we have shown above, Spinoza challenges the statement whereby motivation leads to knowledge and establishes that the acquisition of knowledge is what gives rise to the motivation for the acquisition of further knowledge and so on. "Knowledge" in and of itself evokes positive emotions in us by virtue of being a motive force that expresses a self-determination that is nothing but mental determination and a continued awareness of contentment as opposed to the passive state which preceded it (in this respect, it should be noted that unlike knowledge, understanding is an intermediate mental state which does not include reflection).

If knowledge is a mental state which includes self-awareness, Part 2, Proposition 35 states that the privation of knowledge is also a mental state which necessarily reflects the fact that the lack of knowledge is a passive

Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

state which lacks self-awareness—people who do not know are not aware of the fact that they do not know. In such a state, therefore, people have no motive or reason for self-reflection. Even if they reflect upon themselves, they will not sense anything active occurring in their mind (loc. cit.). The privation of knowledge is the privation of awareness, which is included among unintentional or mutilated or confused ideas. On the other hand, and in Part 2, Proposition 43, Spinoza states that "...He who has a true idea at the same time knows that he has a true idea, and cannot doubt the truth of the thing...." [tr. Curley]. This is because a true idea is knowledge which accords with reality and which is accompanied by a critical reflection that removes doubt.

Empirical Section

The Study's Central Idea (The Rationale): An empirical examination of the positive sensation which accompanies knowledge and the self-awareness of this sensation as advancing the ambition for further knowledge and so forth on a continuum. Spinoza's statement whereby knowledge is an active mental state transforms the concept of "motivation" as a causal motive in traditional education from a reason to the result of knowledge.

Study Objective: Use questionnaires to examine (confirm or reject) Spinoza's 350-year-old statements concerning the correlation between knowledge and the motivation to know more. Just as the privation of knowledge is a mental state, so is knowledge itself. Furthermore, the study aims to investigate the difference between the two within the framework of the melting pot of academic learning processes.

Research Method: A correlational field study for the examination and statistical analysis of the correlation between the variables by way of questionnaires aiming to examine the motivation index (dependent variable) against the knowledge or material absorbed in an earlier state as an independent variable.

Study Procedure

During the past three years of the author's teaching of logic in an academic setting, the focus of knowledge acquisition was positioned on the task of distinguishing between form and content from various perspectives with respect to formal logic and its application (see Yonatan Berg (1998), *Applied Logic: A Guide to the Principles of Argument*. Jerusalem: Branco Weiss Institute [In Hebrew]). The study took place at Zefat Academic College. The composition of the classes tested was heterogeneous and included males and females, Jews, Druze, Muslims, and Christians, as well as both married and single students ranging from 18 to 45 years of age. The questionnaire employed was made up of 10 relevant questions and a 5-point Likert scale for each question. The questionnaire also recorded ethnic/religious affiliation, age, marital status and year of study (first, second, etc.).

Study Hypotheses: (1) there shall be a correlation between knowledge as an independent variable and motivation (for the continued acquisition of knowledge) as a dependent variable. Lest it be unclear, "knowledge" is perceived as a continuous active mental state which shall give rise to motivation—the "hunger" for further knowledge—for further study. In other words, motivation in academics arises from and increases from a positive sensation of knowledge (the acquisition of knowledge).

(2) Logic is a language—the language of reason. Since the author's classes' human make-up was heterogeneous, there will not be any hindrances arising from differences in native languages, religion, age, and gender, and all in the spirit of Spinoza's *Ethics* and its universal statements pertaining to human potential.

Statistical Analysis

The following describes the analysis of an empirical study the author performed to test the hypotheses raised in the present article with respect to the associations between motivation and knowledge.

Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

Hypotheses

Null hypothesis: there will be no statistically significant association between the participants' motivation and knowledge scores. Similarly, there will be no statistically significant association between the participants' religious affiliation and their motivation and knowledge scores.

Experimental hypothesis: there will be a statistically significant association between the participants' motivation and knowledge scores. Similarly, there will be a statistically significant association between the participants' religious affiliation and their motivation and knowledge scores.

Participants

The study sample was made up of 107 participants (42 male, 40 female, and 25 who declined to disclose their gender), aged between 20 and 60, and all students at Zefat Aacademic College (1 first year student, 18 second year students, 44 third-year students, 37 who did not disclose their year, 1 who claimed to be a seventh-year student, 2 who claimed 2022 as their year, and 3 who claimed 2023 as their year). Among these, 49 were single, 36 were married, 21 declined to disclose their marital status, and 1 disclosed their marital status as "other." In addition, 8 participants were Christian, 40 were Jewish, 25 were Muslim, 14 were Druze, 18 declined to disclose their religious affiliation, and 2 disclosed their religious affiliation as "other."

Apparatus

The participants were asked to complete a questionnaire designed by the author, which contained 10 questions, six of which related to motivation, and four of which related to knowledge. The participants were asked to answer each question on a five-point Likert scale, with 1 being the lowest score and 5 being the highest score. The participants were also asked to choose the grade they were expecting to attain at the end of the course (between 0% and 100% at 10% intervals).

Methodology

The participants were assured of their anonymity, and completed the questionnaires as part of the final session of two regular classes (Logic and Political Philosophy) they were taught at the author's institution. Once completed, the questionnaires were collected by the author for further statistical analysis.

Statistical Analysis

Once collected, the questionnaire data was fed into a Microsoft Excel workbook designed to this end and containing the following demographic variables from the questionnaire over and above the participants' answers to the questions : Age, Year, Expected Grade, Gender, Marital Status, and Religious Affiliation. The participants' responses to the motivation and knowledge questions respectively were summed up to create two new variables, viz. Motivation Score and Knowledge Score, which were later used for inferential statistics. The following descriptive statistics were calculated for each non-nominal variable: mean, median, mode, inter-quartile range, range, sample variance, and standard deviation. Given the hypotheses and the characteristics of the sample data, three inferential tests were chosen: Spearman's Rho and Pearson's Product Moment Correlation Coefficient for testing the correlation between the participants' motivation and knowledge scores, and Analysis of Variance (ANOVA) for testing the association between the participants' motivation and knowledge scores and their religious affiliation. In this respect, it should be noted that the two former tests were carried out in the same Microsoft Excel workbook containing the raw questionnaire data, and that the third test was carried out in the Jamovi application, a user-friendly Graphical User Interface (GUI) for the R statistical programming language.

Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

Results

With respect to descriptive statistics, the participants' mean motivation score was 23.99 out of a maximum of 30.00, and their mean knowledge score was 15.83 out of a maximum of 20.00. Their median motivation score was 25.00, while their median knowledge score was 16.00. The respective modes were 30.00 for motivation and 16.00 for knowledge. The interquartile ranges were 7.00 for motivation and 4.00 for knowledge. The score range was 24.00 for motivation and 16.00 for knowledge. The sample variances were 25.50 for motivation and 11.05 for knowledge. Finally, the standard deviations were 5.05 for motivation and 3.32 for knowledge.

With respect to inferential statistics, a Spearman's Rho test carried out on the motivation and knowledge scores revealed a correlation coefficient of 0.820 at the $p \leq 0.0001$ level of statistical significance between the motivation and knowledge scores. Similarly, a Pearson's Product Moment Correlation Coefficient test carried out on the motivation and knowledge scores revealed a correlation coefficient of 0.860 at the $p \leq 0.0001$ level of statistical significance between the motivation and knowledge scores. As for the ANOVA, a two-way test reveals an F-score of 2.92 for motivation and religious affiliation at the $p \leq 0.017$ level of statistical significance and an F-score of 2.64 for knowledge and religious affiliation at the $p \leq 0.028$ level of statistical significance.

Discussion

As a whole, the descriptive statistics suggest that the participants tended to respond with high Likert-scale scores. This is particularly evident when we examine the mode, where we see that the most common response was a full complement of 5s on the questions pertaining to motivation and knowledge respectively. This observation is further reinforced by the histogram in Figure 1, which clearly shows an overwhelming majority of Likert scores ranging between 4 and 5. As far as demographics are concerned, the histogram in Figure 2 shows an overwhelming majority of the respondents as being aged between 16 and 32. Figure 3, in turn, reveals that there were only slightly more male than female respondents among those who agreed to disclose their gender, while Figure 4 reveals an interesting variety of religious affiliations among respondents, with the majority being Jews and Muslims, but with non-negligible representation for Druze and Christians among those respondents who agreed to disclose their religious affiliation.

As for inferential statistics, both the Spearman's Rho and the Pearson's Product Moment Correlation Coefficient tests reveal a strong positive correlation of 0.820 and 0.860 respectively between knowledge scores and motivation scores at a very high level of statistical significance ($p \leq 0.0001$), a result which appears to confirm the experimental hypothesis quite conclusively.

As for the ANOVA test, the results tentatively suggest some kind of statistically significant association between religious affiliation and the knowledge and motivation scores, as suggested by the relatively high F-scores and the high levels of statistical significance, but this requires further study, as religious affiliation was based on the participants' self-reports and would benefit from a more rigorously operational definition of religious belief and practice. For example, it should take into account that the Druze religion is secret and known only to uqqāl initiates, and thus a non-initiate juhhāl can only claim to be Druze by nationality but not by faith.

Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

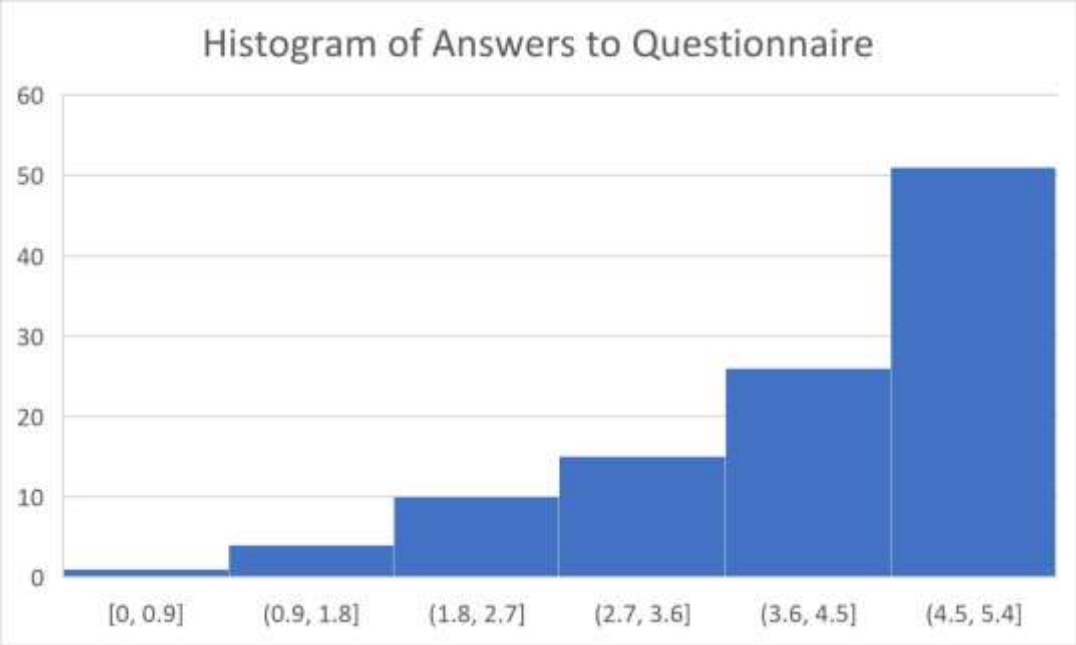

Figure 1

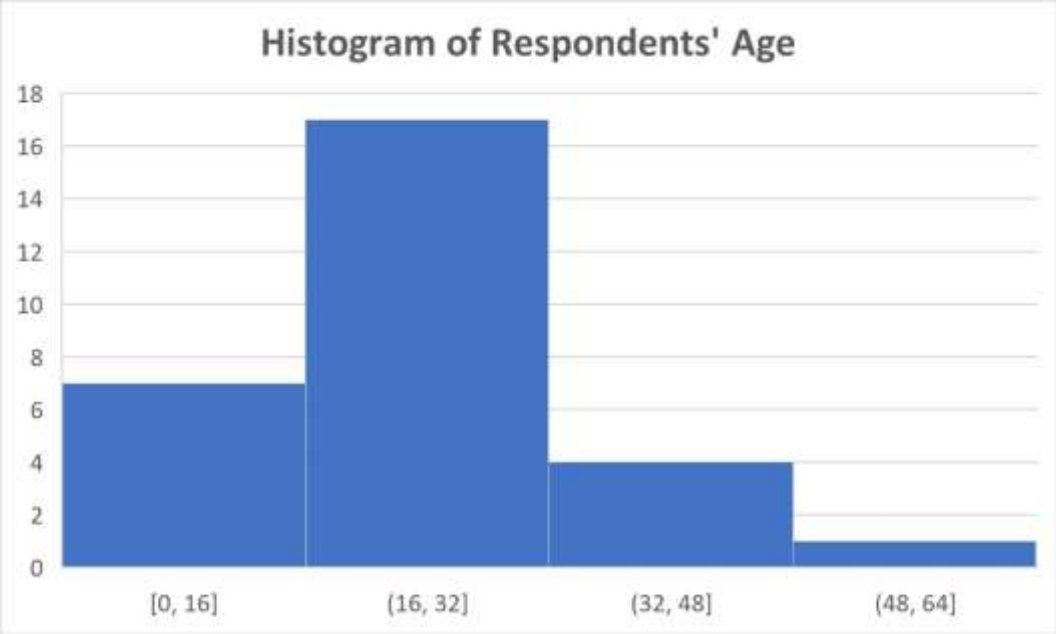

Figure 2

Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

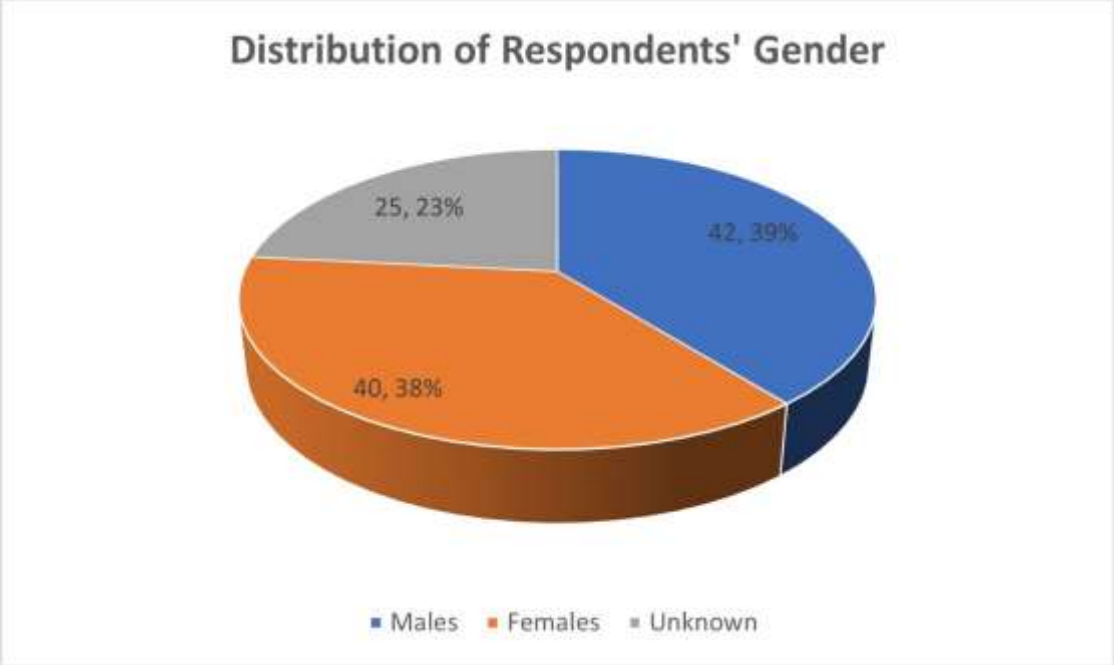

Figure 3

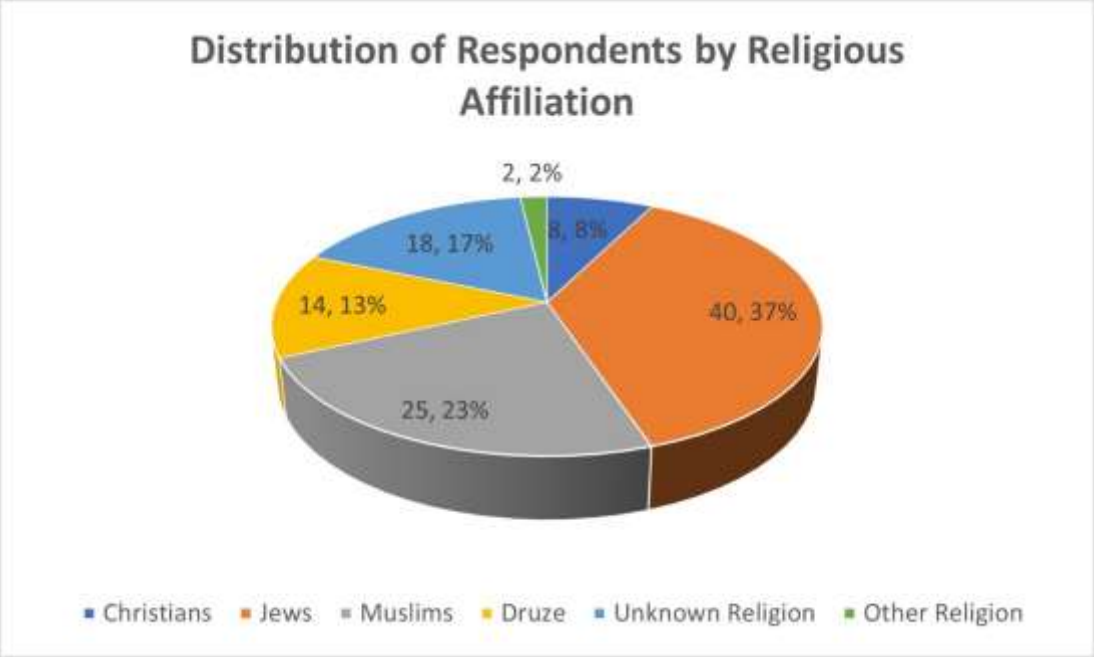

Figure 4

Conclusions

As a whole, the study's results clearly confirm the author's experimental hypotheses, and clearly provide a baseline which the author has every intention of improving and expanding in future work. Thus, for example, he intends to expand and improve his questionnaire, to employ larger and more representative samples, to investigate more variables such as occupation, personality type, intelligence etc., and to employ a more rigorous statistical analysis which might, for example, employ post-hoc tests to complement his

Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

ANOVAs and tests of reliability (such as Cronbach's alpha) and validity (such as Principal Component Analysis) to improve his questionnaire.

Afterword

The Study's Importance and its Contribution to Scientific Knowledge: This is manifested in the domain of education and at all levels of instruction. Unlike the traditional educational worldview, whereby motivation gives rise to understanding and knowledge, the results of the study show that motivation in and of itself (without the 'spice' of knowledge), does not contribute to self-growth, to self-esteem or to a sense of happiness, but rather increases alongside and as a result of the very understanding and the knowledge it entails and forms the cause for a sense of success as well as a motive for the acquisition of further knowledge.

The empirical confirmation of the Spinozan research hypothesis has the capacity to advance a worldview that will—among teachers and lecturers—evoke an awareness that even initially unmotivated students, or students which sought an education for reasons other than the expansion of knowledge (such as for attaining some certification or having others acknowledge their scholastic proficiencies) might change these perceptions when they experience a sense of self-satisfaction as a result of their capacity for knowledge acquisition. Those who acquire knowledge feel self-esteem, that is, become happy people, and this happiness will advance a motivation for "more" within them. From a physical-neurochemical perspective, this positive sensation shall increase dopamine levels in the brain and induce a sensation of pleasure and a desire for continued knowledge acquisition[xiv]

References

Primary Sources

SPINOZA, B. (2016) [1677], Ethica Ordine Geometrico Demonstrata, Amsterdam, n.p. Tr. and Ed. by Edwin M. Curley in The Collected Works of Spinoza (One-Volume Digital Edition). Princeton, NJ: Princeton University Press.

SPINOZA, B. (2016) [1677], Tractatus de Intellectus Emendatione, Amsterdam, n.p. Tr. and Ed. by Edwin M. Curley in The Collected Works of Spinoza (One-Volume Digital Edition). Princeton, NJ: Princeton University Press.

Secondary Sources

BERG, Y. (1998). Applied Logic: A Guide to the Principles of Argument. Jerusalem: Branco Weiss Institute [In Hebrew].

BRIKER, A. (2022). 'Knowledge is a state of mind (at least sometimes)', Philosophical Studies, Vol. 179, No. 5, pp. 1461-1481.

CURLEY, E. (1973a). 'Experience in Spinoza's Theory of Knowledge', in Grene, M. (ed.), Spinoza: A Collection of Critical Essays. Notre Dame, IN: University of Notre Dame Press, pp. 25-59.

GILEAD, A. (1986). The Way of Spinoza's Philosophy: Toward a Philosophical System. Jerusalem: Bialik Institute. [In Hebrew]

KAHNEMAN, D., SIBONY, O., and SUNSTEIN, C. (2021). Noise: A Flaw in Human Judgment. London: William Collins

KIHLSTROM, J. (2023). 'Four problems of mind and body: Celebrating the 80th Birthday of Max Velman', Journal of Consciousness Studies, Vol. 30, No. 1, pp. 87-109.

LIN, M. (2021). 'Spinoza on the Metaphysics of Thought and Extension', in Garrett, D. (ed.), The Cambridge Companion to Spinoza (2nd Ed.), Cambridge: Cambridge University Pres,s pp. 113-140.

MARGALIT, L. (2021). The Shaping of Conscious Awareness: Engineering our Behavior and Sensations in the Digital Age. Haifa: Pardes Publishing [In Hebrew].

MOORE, D. (2023). 'Can the Epistemic Basing Relation be a Brain Process?, Global Philosophy, Vol. 33, No. 2, pp. 1-19.

PRIMUS, K. (2021). 'Reflective Knowledge', in Melamed, Y., A Companion to Spinoza, Malden, MA: Wiley-Blackwell, pp. 265-275.

RENZ, U. (2021). 'Spinoza's Epistemology', in Garrett, D., The Cambridge Companion to Spinoza (2nd Ed.), Cambridge: Cambridge University Press, pp. 141-186.

SANGIACOMO, A. (2023). Spinoza on Reason, Passions, and the Supreme Good. Oxford: Oxford University Press.

YOUPA, A. (2020). The Ethics of Joy: Spinoza on the Empowered Life. New York: Oxford University Press.

Journal of Ecohumanism
2025
Volume: 4, No: 4, pp. 873 – 884
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i4.6809

Notes

[i] For a comprehensive discussion of mind and body, dualism, and monism, see Martin Lin (2021). "Spinoza on the Metaphysics of Thought and Extension." in Don Garrett (ed.) *The Cambridge Companion to Spinoza (2nd Ed.)*, pp. 113-140. Cambridge: Cambridge University Press. Also see John F. Kihlstrom (2023). "Four problems of mind and body: Celebrating the 80th Birthday of Max Velman." *Journal of Consciousness Studies* 30(1): 87-109. doi: https://doi.org/10.53765/20512201.30.1.087; Dwayne Moore (2023). "Can the Epistemic Basing Relation be a Brain Process?" *Global Philosophy* 33(2): 1-19. doi: 10.1007/s10516-023-09673-3.

[ii] Briker (2022) argues that knowledge is a mental state with mental (epistemic) and physical (neuro-cognitive) aspects. With that said, he further notes that "…However, as the available (direct) cognitive and neurocognitive evidence is presently quite limited, I am hesitant to conclude on this basis that being in this particular mental state is also necessary for knowledge…." (p. 1478). See Adam Michael Briker (2022). "Knowledge is a state of mind (at least sometimes)." *Philosophical Studies* 179:5 1461-1481. doi: 10.1007/s11098-021-01714-0.

[iii] See Kristin Primus (2021), "Reflective Knowledge" in Yitzhak Y. Melamed (ed.), *A Companion to Spinoza*. Malden, MA: Wiley-Blackwell, p. 267.

[iv] Urusula Renz (2021). "Spinoza's Epistemology." In Don Garrett (ed.), *The Cambridge Companion to Spinoza (2nd Ed.)*, pp. 141-186. Cambridge: Cambridge University Press. The excerpt is from p. 146.

[v] See Amihud Gilead (1986). *The Way of Spinoza's Philosophy: Toward a Philosophical System*. Jerusalem: Bialik Institute, p. 320 [In Hebrew].

[vi] Also see Amihud Gilead (1986). *The Way of Spinoza's Philosophy: Toward a Philosophical System*. Jerusalem: Bialik Institute, p. 95 [In Hebrew].

[vii] While the present study is not concerned with axiological knowledge as a motivator, I nonetheless believe that the former also possesses something individuals can rely on, if only due to the positive sensation knowledge produces in the mind. This principle, in turn, also makes it difficult to ignore items of axiological knowledge. Compare Youpa (2020: 10-28).

[viii] See Amihud Gilead (1986). *The Way of Spinoza's Philosophy: Toward a Philosophical System*. Jerusalem: Bialik Institute, p. 173-176 [In Hebrew].

[ix] Daniel Kahneman, Olivier Sibony, and Cass Sunstein (2021). *Noise: A Flaw in Human Judgment*. London: William Collins, pp. 221-244.

[x] Ursula Renz (2021). "Spinoza's Epistemology" In Don Garrett (ed.). *The Cambridge Companion to Spinoza*, pp. 141-186. Cambridge: Cambridge University Press. The excerpt is from p. 168.

[xi] See Curley, Edwin M. (1973a), "Experience in Spinoza's Theory of Knowledge", in Marjorie Grene (ed.), *Spinoza: A Collection of Critical Essays*. Notre Dame, IN: University of Notre Dame Press, pp. 25-59.

[xii] See Curley, Edwin M. (1973a), "Experience in Spinoza's Theory of Knowledge", in Marjorie Grene (ed.), *Spinoza: A Collection of Critical Essays*. Notre Dame, IN: University of Notre Dame Press, pp. 25-59.

[xiii] Andrea Sangiacomo (2023). *Spinoza on Reason, Passions, and the Supreme Good*. Oxford: Oxford University Press, p. 178.

[xiv] Akin to the sensations induced by eating chocolate, Margalit (2021) describes increased levels of dopamine in the brain as the physiological expression of a motivation for more. In our case, this is a motivation for "more" knowledge. See Liraz Margalit (2021). *The Shaping of Conscious Awareness: Engineering our Behavior and Sensations in the Digital Age*. Haifa: Pardes Publishing, chapters 9 and 10 [in Hebrew].