

The manual introduces basic dissection knowledge on Neuroanatomy to Biopsychology students. It is divided into 12 sections, with a post-test for each section. The first section orients students to the Neuroanatomy laboratory and the proper behavior during laboratory session. Section 2 presents a layout of the human nervous system and the major divisions of the brain based on embryological development. Section 3 includes a description of the general structures in the nervous system and its covering. Sections 4 to 11 guide students in the dissection and identification of the parts of the brain using a step-by-step approach. Finally, section 12 includes a synthesis of the whole manual and the overall post-test.

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This text is intended for use by foreigners who have knowledge of the English language, including grammar, and the desire to study the Filipino language extensively. At the same time, it serves as a refresher for those who have already experienced using the Filipino language but have not been able to do so continuously because they presently



The study investigates and optimizes the important parameters affecting the cleaning performance of beverage crate washing machines. These parameters include soaking temperature, soaking duration, liquid agitation, and use of detergent. Also included are spray washing parameters of pressure, duration, impingement angle, and nozzle diameter. The criterion used for evaluating the cleaning performance as affected by the various parameters is the degree of dirt removal. This is indirectly measured by comparing the luminance of the crate surface—before and after the washing treatment—from digital images of the test surface.

A test setup consisting of a soaking tank and spray section with crate conveyor has been designed and fabricated. Likewise, a digital imaging setup for taking photos of the test crates under consistent lighting conditions has been done. In order to have uniform starting levels of dirt on the test crates, artificial dirt consisting of fine charcoal dust mixed with an adhesive agent such as sugar syrup and water-based glue is applied. Digital photos of pre-marked areas before and after the washing treatment are taken and analyzed for average luminance. The net change of luminance is computed, and this corresponds to the level of dirt removed.

Results show that the soaking process



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A brand is a name, term, sign, symbol, design, or a combination of these intended to identify the goods or services of one company or groups of sellers and to differentiate them from those of other competitors. In building strong brands, perception of quality differences among brands is essential for survival in the marketplace. The “share of mind” must be significant so that the brand can gain brand equity.

In an empirical study done by the proponent, the results show that some Philippine brands have gained brand equity through their rational and emotional attributes as perceived by their consumers. These brands are as follows:

Brand	Product Category
• San Miguel Pale Pilsen	- alcoholic drink/beer
• Jollibee	- fast-food restaurant
• Datu Puti	- food seasoning/vinegar
• Andok’s Litson	- food stall/grilled chicken
• Tostillas	- snack food
• Hapee	- toothpaste
•	



FACTORS INFLUENCING THE CAREER CHOICE OF COLLEGE FRESHMEN IN SCIENCE AND ENGINEERING: A Study of Private and Public Universities

This study aims to describe the different factors that may influence the students' career choice in higher education eventually leading them to choose a course in science or engineering. A total of 540 students were chosen from three private universities and three public universities in the National Capital Region: 174 respondents came from the private universities (De La Salle University, University of Santo Tomas, and University of the East) and 366 respondents came from public universities (Philippine Normal University, University of the Philippines-Manila, and Pamantasan ng Lungsod ng Maynila). Of these respondents, 284 are males and 256 are females. A general survey method was used to gather data.

The survey questionnaire is a modification of the instrument, Factors Affecting Schools' Success in Producing Engineers and Scientists (FASSIPES) developed by Brian Woolnough of the Department of Educational Studies of Oxford University. Descriptive and inferential statistics were used to analyze the data. Multiple regression analysis was done on the different factors that influence career choice of student respondents in private or public universities in which six prediction equations were obtained.

The study reveals the following:

1. The different factors influencing student career choice in science or engineering in selected private or public universities are in-school factors, out-of-school factors, and personality traits.
2. There is a significant association between career choice in science or engineering and each of the following factors: a) gender, b) high school curriculum, c) school where the respondents graduated from, d) scholarship grant, e) parents' educational attainment, f) parents' college degree, g) period when career choice was made, and h) close relatives who are involved, one way or the other, in the fields of science and mathematics;
3. Adventurous, caring for people/things, conscientious, hardworking, clever, enthusiastic, gregarious, and self-sufficient or independent-minded are the dominant personality traits common to all the respondents.
4. Creativity is a personality trait for male respondents who have chosen a career in engineering but not for female respondents.
5. Majority of the respondents have chosen a career in science or engineering because of social status of the job, job availability, and financial security.
6. Male and female respondents have significantly different perceptions on sex-stereotyping of science or engineering as a career.
7. Engineering is viewed as a career for men only and physics is viewed as a career mostly for men.
8. For male respondents, the predictors that have positive effects on career choice are involvement in science clubs, quality of science teaching in high school, salaries offered in mathematics, and science & technology professions.
9. For female respondents, the predictors that have positive effects on career choice are quality of science teaching in high school, exam results in high school math, father's occupation, career of siblings, social status in science and math, and career advice from high school guidance counselor.

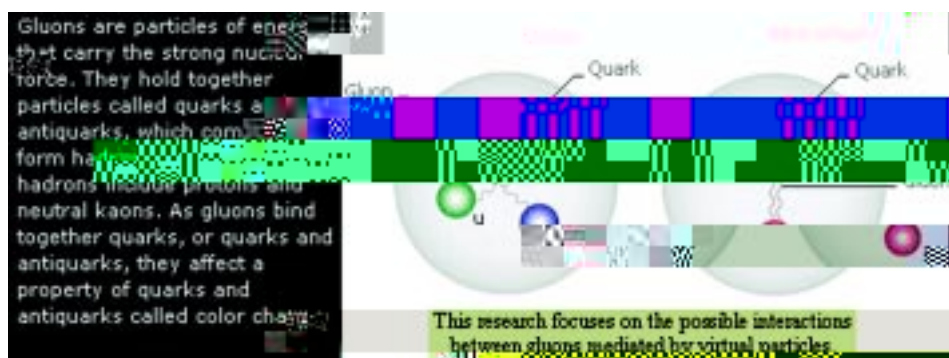


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Calculation of One-loop Effective Multigluon Interaction Lagrangians with Derivative Corrections in Arbitrary Dimensions



The one-loop effective Lagrangians for Yang-Mills fields interacting with matter are calculated accommodating this time the higher covariant derivative corrections through the background gauge connection. In particular, the one-loop effective multigluon interaction Lagrangians mediated by vectors and ghosts, scalar bosons, and Dirac fermions are evaluated separately in arbitrary space-time dimensions and in arbitrary gauge group.

The one-loop interaction Lagrangians are evaluated explicitly for $N = 2, 3, 4$ powers of the background gluon field and alternatively for $D = 4, 6, 8$ mass dimensions, based on the two plausible definitions of the N -gluon process, namely: power-based and (mass) dimension-based. It is found that derivative corrections appear for $N = 2$ and for $D = 6$. In the appropriate limits, these results agree with those found in the references cited.



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