

新冠肺炎爆發期間路殺社參與者對於動物屍體 標本蒐集的態度與行為意圖初探

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摘要

有鑑於新冠肺炎(COVID-19)大流行至今，已經影響、改變了人類的行為與活動。然而科學家們大多認為新冠肺炎的起源，可能與不當的利用野生動物(例如穿山甲或蝙蝠)有關。臺灣動物路死觀察網(以下簡稱路殺社)是一個紀錄動物路死的公民科學計畫，為目前臺灣參與人數最多、規模最大的公民科學計畫。參與者(或稱公民科學家)僅須利用簡單的操作，以手機拍攝路死動物之照片，即可將資料上傳至資料庫，供後續科學研究之利用。除此之外，若路死動物標本完整，參與者則可以將標本蒐集後寄至特有生物研究保育中心，進行後續分析。但隨著新冠肺炎疫情發展，人們擔心病毒可能源自於野生動物並直接傳染給人類。本研究希望瞭解疫情爆發後路殺社參與者對於蒐集動物屍體的態度與行為，共蒐集了121份有效問卷，其中包含51位未曾採集過屍體標本之參與者，以及70位曾經採集過標本之參與者。本研究將蒐集屍體資料視為親環境行為，而使用二階段決策模型作為理論基礎，探討兩群(有無蒐集經驗)受測者之親環境態度與行為意圖。以卡方檢定有無蒐集經驗之親環境態度的各個面向，結果顯示相互獨立，即兩群受測者在環境態度各個面向皆相同。而在親環境行為的面向，可行性評估及行為意圖在兩群受測者間相互不獨立，也就是有無蒐集標本經驗者在環境行為面向上有所不同，有蒐集標本經驗之受測者較傾向繼續進行推廣及蒐集標本之行為，推測應與先備經驗有關，有經驗者較能瞭解潛在風險並做好相對應的防護。總體而言，受測者有很高的比例願意繼續進行蒐集標本的親環境行為，可能與調查期間我國疫情狀況尚未急遽變化有關，以及路殺社公民

科學十年來致力於環境教育，使受測者具有正向的環境意識和信心。

關鍵字： 公民科學、新冠肺炎、臺灣動物路死觀察網、親環境行為意圖、環境態度

本研究使用受測者勾選適合其想法題項之間卷，並無比較程度差異的統計分析，在未來研究中可以設計以李克特氏量表，來探討不同面向程度間的差異。也因為並非李克特氏量表，本研究為了希望快速瞭解參與者的想法下，問卷並沒有進行信度分析，僅透過專家審查內容效度，此為本研究之限制。此外，在有些題項經檢討後仍有疑慮，像是在效能信念的題項「只要做好防護，公民都可以參與、盡一份心力」，其中「盡一份心力」可能是額外的價值判斷，具有引導答題的效果。另外在認知嚴重性的題項「雖然被感染的機率很低，但你知道撿拾動物大體仍可能有被感染的風險嗎？」似乎已經在題目中有答案了，亦即「感染的機率很低」就是「仍有機率」的意思。以上這類問題往往在研究中都應盡量避免，以做出更適當的提問。

本研究之結果對於路殺社計畫主持人與核心成員是很有幫助的，但對於二階段決策模型之理論修改、匹配測試較少琢磨，在未來仍需要更進一步地研究。

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A Preliminary Study on Participants' Attitudes and Behavioral Intentions towards Collecting Corpse Specimens in the Time of COVID-19 Pandemic: Cases from the Taiwan Roadkill Observation Network

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Abstract

In the time of COVID-19 pandemic, there have been several severe impacts on human activities all over the world. Some researchers presume that the COVID-19 virus might originate from wild animals such as pangolins and bats. Taiwan Roadkill Observation Network (TaiRON) is the most popular citizen science project which recruits volunteers (citizen scientists) to collect animal carcass specimens from roadkill in Taiwan. This pilot study is to understand the volunteers' attitudes and pro-environmental behaviors. A two-phase decision model for the theoretical framework has been used in this study. A total of 121 valid questionnaire responses have been collected. Among them, 70 participants have experiences in collecting corpse specimens while 51 have no such experiences. The preliminary result reveals that the attitudes of participants with or without the experience of collecting specimens have no significant differences by Chi-squared test. However, the participants who had the specimen collection experience scored higher than those who did not have experience in the behavioral intention dimension. It has been speculated that the volunteers who had the experience could understand the potential risks more easily and protect themselves. Overall, all of the participants were willing to conduct the specimen collection behavior. This could be due to the relatively stable COVID-19 situation in Taiwan in comparison to the rest of the world during the survey period. Thus, after the citizen scientists assessed the condition,

they still wished to contribute to scientific research and conservation. Moreover, in the past 10 years, the TaiRON has been dedicated to promoting environmental education so that its volunteers have positive environmental consciousness and confidence.

Keywords: citizen science, COVID-19, Taiwan Roadkill Observation Network, pro-environmental behavior, environmental attitudes