Understanding public support for recycling policy: To unveil the political side of influence and implications

Calvin Wan[a,*], Geoffrey Qiping Shen[b], Stella Choi[a]

[a] School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong
[b] Department of Building and Real Estate, The Hong Kong Polytechnic University, Hong Kong

ARTICLE INFO

ABSTRACT

Policy support from the public is gaining importance for successful implementation of environmental policy. Yet the underlying factors of policy support for environmental policy have not been comprehensively examined. While considerable number of studies offered explanation of the phenomenon from the perspective of environmental psychology and social psychology, the growing attention to political factors has not been adequately addressed. In light of this, the present study systematically identified political factors and integrated them with psychological attributes to build a conceptual model for investigating level of policy support for recycling policy. A random household telephone survey was conducted in Hong Kong. 504 valid responses were collected for model testing. The results suggested that although psychological attributes, attitude and perceived benefits, are significant in predicting recycling policy support, political factors are stronger predictors, which perceived policy effectiveness, policy fairness, policy preference, and participatory process demonstrated a significant effect on the level of policy support. In addition, the explanatory power of the conceptual model remarkably increased after political factors were added to the model. The model enables us to compare effects of different sources on the level of policy support, in turn, advances our understanding of the phenomenon. In addition to shaping positive attitude towards recycling and enhancing perceived benefits of recycling practices among the public, policy-makers should put more efforts in formulating a fair, responsive recycling policy that demonstrates capability of policy goal attainment. Public involvement during policy formulation stage is also highly encouraged for mobilizing greater public support.

1. Introduction

Policy support has been gaining increasing concern in waste management domain (e.g., Dunne et al., 2008; Triguero et al., 2016; Wan et al., 2015; Xiao et al., 2017). It is essential to make an environmental policy feasible (de Groot and Schuitema, 2012). Public opposition is a barrier to seamless implementation of policy (Cherry et al., 2012; Rauwald and Moore, 2002); without public support, environmental policies are likely to end in failure (Wan et al., 2017). Therefore, to obtain an in-depth understanding of factors that provoke public support for recycling policy is of utmost importance.

Stern (2000) defined policy support as a form of non-activist environmental behavior which people accept or support environment policies. It was classified as an indirect pro-environmental behavior because showing support to an environmental policy would benefit the environment or mitigate environmental problems (Kollmuss and Agyeman, 2002). To accept or support a policy denotes that an

individual will make material sacrifices or change his/her behavioral patterns to achieve policy goals (Stern et al., 1999). Typical examples of policy support are willingness to pay a higher environmental taxes, changing personal behaviors in accordance with policy prescriptions, and indicating approval of environmental regulations (Stern, 2000; Wan et al., 2015).

Though investigation of policy support for environmental policy has been gaining more attention, there is a lack of systematic examination of the concept and the concept has rarely been studied with the purpose of building conceptual models. Many previous works restricted their investigations to identifying potential factors explaining variance in policy support and examined the predictability of these factors (e.g., de Groot and Schuitema, 2012; Keramitsoglou and Tsagarakis, 2013; Tobler et al., 2012; Wan et al., 2015). A great variety of variables were identified; however, results and drawn conclusions are fragmentary, incomprehensive, and difficult to conceptualize, which fail to provide researchers with a solid theoretical foundation for additional

---

exploration of the phenomenon (cf. Barr, 2007). Moreover, most established works suffer from conceptual bias. Since policy support was first defined as an environmental behavior by Stern (2000), research has targeted social psychological factors to reach possible explanations of the phenomenon (e.g., Rauwald and Moore, 2002; Steg et al., 2005; Stern et al., 1999; Wan et al., 2015). Though studies investigating effects of policy features and political environment can also be found in current literature, attention given to these factors is far from enough. Given that the majority of the public are subject to recycling policies, it is argued that facets of a policy plays a significant role in determining the level of policy support (Jagers et al., 2017) that is worthy of further examination.

The aim of the current study is to comprehend the driving forces of policy support and gain better understanding of political side of influence on the phenomenon. To this end, we first systematically identify a set of psychological and political factors influencing policy support for recycling instruments. A conceptual model integrating identified factors is developed. The model enables us to test and compare the effects of psychological and political factors on the level of policy support. The study makes conceptual and practical contributions as follows. First, unlike traditional studies which investigated the concept from the psychological perspective, this study offers a fresh angle, i.e., policy features and political environment (or political factors as an umbrella term throughout the paper) to examine individuals' levels of policy support. Second, to authors' best knowledge, this is the first empirical study attempts to systematically integrating both psychological and political factors into a single conceptual model for analysis of policy support. The construction enables us to compare effects of two distinguished set of driving forces, which is expected to advance the understanding of the concept. Third, while most previous studies focused on examining policy support of environmental policy in general, this study gives special attention to recycling policy which all-round support from the public is crucial to the overall success of policy. Findings of this study would offer policy-makers a new approach of recruiting broader public support for recycling measures.

The remainder of the paper is organized as follows. Section 2 presents the logic and justification of conceptual development of this study, associated with the exploration of both psychological and political factors that may contribute to policy support. Section 3 is the methodology of the research. It includes description of study area, questionnaire design, data collection method, and procedures of statistical analysis. Descriptive findings are reported in Section 4. Section 5 is discussion which consists of theoretical reflections on the concept policy support, policy implications, and limitations of the study. Conclusion section will end with a summary of the article.

2. Conceptual development

2.1. Rationale behind systematic factor identification

Of particular interest for this paper is to advance the understanding of nature and origin underlying the phenomenon of public support for recycling policy. The practice helps us identify potential factors of policy support systematically and form the skeleton of building a proper model for analysis. We argue that there are two dimensions working in parallel influencing the level of policy support, which should be taken as a starting point of investigation.

The core objective of most environmental policies is initiating changes in personal behavioral patterns for the purpose of protecting the environment or mitigating environmental problems (cf. Elmore, 1987; Schneider and Ingram, 1990). Similarly, the basic assumption underlying recycling policy is manipulating behaviors of targeted individuals for attaining policy goals such as waste minimization (Steg and Vlek, 2009; Stern, 2000 p. 409). Policy prescriptions would be the focus of attention in this connection. Individuals' psychological attributes in relation to prescribed behaviors matter to the level of policy

support. Meanwhile, governments have power and authority over the public; people's behaviors are subject to public policy and they are required to comply with policy prescriptions (Schneider and Ingram, 1990). The policy itself and situated political environment form another dimension of influence. Specifically, policy features (e.g., fairness, effectiveness, and formulation processes) and individuals' relations with governments would cause primary concern amongst targeted populations. We argue that whether or not individuals would show support to a policy is, by and large, based on these two dimensions of the policy. By following the logic, we consider that psychological motivations towards the behaviors in question as well as policy features and relations with governments together constitute policy support. A similar argument was proposed by Wan et al. (2017) that policy support can be driven by internal motivators (e.g., psychological attributes) and external forces (e.g., policy features).

We label factors derived from these two dimensions influencing policy support as psychological factors and political factors. Psychological factors deal with targeted individuals' psychological attributes and subjective evaluation towards policy prescriptions. For example, attitude is a typical psychological indicator that may influence individuals' evaluation of prescribed behaviors and in turn the level of policy support. Political factors include policy characteristics and individuals' relations with governments; examples are fairness of a policy and degree of public participation provided during policy formulation processes. The quality of political factors is largely determined by governments' overall practices and performance. The rest of Section 2 provides elaboration and justification of these two driving forces of policy support, accompanying with identification of two distinguished set of variables derived from them.

2.2. Policy support as a basket of psychological attributes

Most environmental problems are caused by environmentally harmful human activities (Steg and Vlek, 2009). Objectives of recycling policy are based on the assumption that personal behavioral patterns could be changed as a result that would benefit the environment (Costanzo et al., 1986; Steg and Vlek, 2009). Therefore, one of the policy goals of recycling measures is to enhance public participation in recycling programs and to induce environmentally-benefited behaviors. An individual makes changes in behavioral patterns according to policy prescriptions is considered as policy support. It is because he/she makes a respond to the call of policy objectives. Therefore, internal motivations that trigger behavioral changes in recycling practices would be the focal point of investigation. In this regard, psychological variables for pro-environmental behaviors prediction provide a rich source examining formation of public support for recycling policy. They are variables relate to individuals' perceptions towards the behaviors in question (Barr, 2007) and they have been widely adopted for human behavior explanation and model construction. According to Vining and Ebreo (1992) and Stern (1992), psychological variables are more superior to other variables such as demographic factors in predicting recycling behaviors. In the present study, five psychological factors closely associate with recycling behaviors were identified, namely, attitude, social influences, perceived benefits, past behavior, and place attachment.

2.2.1. Attitude

Attitude serves as a compass indicating an individual's subjective evaluation of an object (Fishbein and Ajzen, 1975). An individual's degree of favor towards an object has significant predictive power for behavioral intention and behaviors (Ajzen, 1991). A large number of studies demonstrated a positive link between specific attitude and pro-environmental activities (e.g., Chan, 1998; Chen and Tung, 2010; Cheung et al., 1999; Tonglet et al., 2004; Valle et al., 2005). Eagly and Chaiken (1992) explained that people possessing positive attitude would result in engagement in behavior that approach, support, or